

HOTEL AND MOTEL FIRE SAFETY ACT OF 1989

HEARING

BEFORE THE

SUBCOMMITTEE ON THE CONSUMER

OF THE

COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION

UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

ON

H. R. 94

TO AMEND THE FEDERAL FIRE PREVENTION AND CONTROL ACT OF 1974
TO ALLOW FOR THE DEVELOPMENT AND ISSUANCE OF GUIDELINES
CONCERNING THE USE AND INSTALLATION OF AUTOMATIC SPRIN-
KLER SYSTEMS AND SMOKE DETECTORS IN PLACES OF PUBLIC
ACCOMMODATION AFFECTING COMMERCE, AND FOR OTHER
PURPOSES

APRIL 19, 1990

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HOTEL AND MOTEL FIRE SAFETY ACT OF 1989

THURSDAY, APRIL 19, 1990

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
SUBCOMMITTEE ON THE CONSUMER,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:16 a.m., in room SR-253, Russell Senate Office Building, Hon. Richard Bryan (chairman of the subcommittee) presiding.

Staff members assigned to this hearing: Moses Boyd and Linda Lance, staff counsels and Sherman Joyce, minority staff counsel.

OPENING STATEMENT BY SENATOR BRYAN

Senator BRYAN. I would like to take this opportunity to welcome everyone this morning to the hearing on H.R. 94 by the Consumer Subcommittee of the full Commerce Committee.

As I think everyone here knows, this legislation was introduced by Congressman Boehlert, who joins us this morning and will testify shortly, also joined by his colleague from the House, Congressman Walgren and Congressman Kurt Weldon will also be along shortly to testify as well.

The bill was passed by the House during the last session, and the purpose of today's hearing is to obtain additional information on the need for and the probable impact of this legislation.

I think all would agree this bill has a laudable goal: to promote fire and life safety in places of public accommodations. It is the method employed that has prompted some disagreement, and we will hear testimony from witnesses who offer that point of view.

The United States has the highest rate of deaths and injuries due to fire in the industrialized world, so I think it is abundantly clear that there is ample room for improvement.

In 1988 or 1980, rather, as Nevada's Attorney General I had the opportunity to learn firsthand the tragedy of hotel fires. My state in 1980 and 1981 experienced two hotel fires that resulted in a total of 94 lives lost and more than 600 people injured.

These disasters were emotionally and economically devastating to our state and resulted in the passage of one of the most stringent fire safety laws in the nation. Nevada's law includes a requirement that most hotels install both fire sprinklers and smoke detectors, and that requirement was imposed retrospectively. The State Fire Marshal from Nevada will also be here today and offer testimony as to the circumstances of the implementation of Nevada's law.

The continuing incidence of hotel fires is disturbing. Just weeks ago another tragic fire occurred in the Fontana Hotel in Miami Beach claiming the lives of three elderly residents and causing a great many injuries.

There are other examples including the Dupont Plaza Hotel fire in San Juan, Puerto Rico on New Year's Eve in 1986 which killed 97 people. There can, it seems to me, be no reasonable disagreement on the goals and purposes of this bill and on the fact that sprinklers and smoke detectors save lives.

As the testimony this morning will point out, there are differences of opinion about the approach that we take in promoting these goals, and we have a distinguished panel of witnesses who will offer testimony on these various points of view.

The subcommittee is pleased to have with us this morning one of our distinguished members, and I will yield to him, Senator John McCain.

OPENING STATEMENT BY SENATOR MCCAIN

Senator MCCAIN. Thank you very much, Mr. Chairman. I appreciate the fact that you are holding this hearing. I think this is an important item, and I would also like to congratulate you, Mr. Chairman, on making this subcommittee a very active one and one which has served to address a number of issues important to the people of this country, including our seniors.

Mr. Chairman, I am pleased to see my colleagues Sherry Boehlert, Doug Walgren and Kurt Weldon here, who are, frankly, the parents of the Congressional Fire Services Caucus. I guess Kurt Weldon could be described as a motivating force that has made this Fire Services Caucus, I believe, the largest in the Congress. Is that right, Kurt?

All three of them have worked long and hard on H.R. 94, and we would not be considering this legislation today if it had not been for their hard work. So I am pleased not only that they are here, but I look forward to their statements in support of this legislation.

Mr. Chairman, when I joined the Congressional Fire Services Caucus, I was appalled to learn that the United States has a higher instance of death and property loss due to fire than any industrialized nation, and that this situation has remained unchanged for over a decade.

There are approximately 6,000 deaths and \$10 billion damage annually as a result of fire in this country. This hearing is very timely coming as it does the morning after the second annual National Fire and Emergency Services Dinner, and only a few weeks after the disastrous fire in a New York social club. That incident highlighted the need for a genuine commitment on the part of public officials to enact and enforce tough fire safety legislation.

This bill was first introduced, as you mentioned, Mr. Chairman, in the wake of another fire tragedy down in Puerto Rico which killed 97 people. Most of those deaths could have been avoided had the hotel been equipped with a fire sprinkler, a fire protection system. Indeed, according to the National Fire Protection Association, there has never been a multiple loss of life in any building that has been sprinklered according to national codes.

The product of extensive negotiation, H.R. 94 has undergone some changes. It no longer calls for the U.S. Fire Administration in the Federal Government to promulgate guidelines for fire safety through a rule making. Instead, it incorporates existing voluntary national standards.

I think it is appropriate for fire safety to remain a state and local government responsibility. Under the provisions of the bill as it passed the House, the states are given maximum flexibility, and the bill does not interfere with their existing powers over fire and building codes. There are no new mandatory requirements.

In addition, the bill's provisions would be phased in gradually with limitations on Federal travel not taking effect for four years.

I am glad to see that these provisions were included to protect the mom and pop establishments.

A special note, Mr. Chairman. I am very pleased to see that H.R. 94 requires that the Federal Travel Director specify those travel lodgings which offer emergency alerting devices for the hearing impaired and disabled. All too often our nation's 24 million deaf and hearing impaired individuals are forgotten as we try to develop warning systems for the general public. I am glad we are seeking to address this problem within H.R. 94.

I do remain concerned about certain other aspects of the legislation, however. In particular, I worry that we may not be giving adequate attention to other effective fire safety systems. Many hotel fire deaths are brought about by toxic fumes which are not necessarily accompanied by enough heat to activate a sprinkler. The toxicity and flammability of materials used in construction and furnishings is one of the greatest factors in hotel fire fatalities. Perhaps we should take into account efforts hotels and motels may have made already to create a fire-resistant environment.

Similar concerns have also been raised that H.R. 94 may encourage fire safety trade-offs. In other words, that the push for sprinkler systems may result in cutting back on or getting rid of other safety features such as containment construction or fire-retardant furnishings. I certainly believe we should do all in our power to prevent this kind of backsliding.

I look forward to hearing the testimony of our witnesses today on this very important legislation. I think this legislation holds great potential to save the lives not just of hotel guests and Federal employees, but also the lives of the gallant members of our fire service community.

Thank you, Mr. Chairman.

Senator BRYAN. Senator McCain, thank you very much for your comments. We are delighted to have in the aftermath of an extraordinarily successful dinner last night—more than 2,000 attended—the prime sponsor of this legislation. I invite Congressman Sherry Boehlert from the 25th district of the state of New York to begin with us this morning. Welcome, Congressman.

But first, I would like to include in the record, statements by Senators Kasten and Gorton.

[The statements and bill follow:]

OPENING STATEMENT BY SENATOR KASTEN

Mr. Chairman, I am pleased that we are holding this hearing on H.R. 94, the Hotel and Motel Fire Safety Act of 1989. I recognize that this bill is strongly supported by the fire safety community, and certainly no one can disagree with its purpose statement "to save lives and protect property by promoting fire and life safety in hotels, motels, and all places of public accommodation affecting commerce."

However, Mr. Chairman, I believe that there is a point that must be taken together with the detection and suppression of fires to which this bill speaks. The containment, or compartmentation, of the fire, which relates to the materials used in the construction and furnishing of the facility, must be taken into account in such a bill as this.

We should not direct all of our resources toward just 2 of the 3 important elements relating fire safety. Particularly with regard to future construction, if there are not some changes to this bill I believe we could in fact be allowing less safe buildings to be designed and built. If we only deal with the two systems which can fail, sprinklers and alarms, and don't recognize the part that fire retardant materials can play in reducing the risks from a fire, I don't think we will have addressed the problem adequately.

I look forward to this hearing, and look forward to working with you, Mr. Chairman, and the subcommittee to improve this bill.

OPENING STATEMENT BY SENATOR GORTON

Mr. Chairman, I would like to thank you for holding this hearing on H.R. 94, the Hotel and Motel Fire Safety Act of 1989. I recognize that the House Committee on Science, Space, and Technology has devoted considerable resources to craft this legislation. I congratulate Representatives Boehlert and Walgren for their efforts, and I welcome them to the Subcommittee.

H.R. 94 attempts to make travel safer for the American public by requiring hotels and other places of public accommodation to install sprinkler systems and smoke detectors in guest rooms. The bill all but prohibits federal employees from staying in a hotel while on business unless it is retrofitted with a sprinkler and smoke alarm after a specified phase-in period. Since the federal government spends approximately \$1.6 billion annually on hotel bills, this is a powerful incentive.

The Subcommittee must decide whether the incentives in the bill are reasonable and appropriate. Some critics contend that to require all hotels to retrofit is to ignore other important components of fire safety, such as flame retardant structures and materials. It is my hope that the witnesses will provide insight into this and other issues.

Mr. Chairman, again, I thank you for holding this hearing. I look forward to the witnesses' testimony.

101ST CONGRESS
1ST SESSION

H. R. 94

IN THE SENATE OF THE UNITED STATES

NOVEMBER 17 (legislative day, NOVEMBER 6), 1989

Received

NOVEMBER 22 (legislative day, NOVEMBER 6), 1989

Read twice and referred to the Committee on Commerce, Science, and
Transportation

AN ACT

To amend the Federal Fire Prevention and Control Act of 1974
to allow for the development and issuance of guidelines
concerning the use and installation of automatic sprinkler
systems and smoke detectors in places of public accommo-
dation affecting commerce, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 SECTION 1. SHORT TITLE.

4 This Act may be cited as the "Hotel and Motel Fire
5 Safety Act of 1989".

1 SEC. 2. FINDINGS AND PURPOSE.

2 (a) FINDINGS.—Congress finds that—

3 (1) more than 400 Americans have lost their lives
4 in multistory hotel fires over the last 5 years;

5 (2) when properly installed and maintained, auto-
6 matic sprinklers and smoke detectors provide the most
7 effective safeguards against the loss of life and property
8 from fire;

9 (3) some State and local governments and the
10 hotel industry need to act more rapidly to require the
11 installation and use of automatic sprinkler systems in
12 hotels; and

13 (4) through the United States Fire Administration
14 and the Center for Fire Research, the Federal Govern-
15 ment has helped to develop and promote the use of
16 residential sprinkler systems and other means of fire
17 prevention and control.

18 (b) PURPOSE.—It is the purpose of this Act to save
19 lives and protect property by promoting fire and life safety in
20 hotels, motels, and all places of public accommodation affect-
21 ing commerce.

22 SEC. 3. HOTEL AND MOTEL FIRE PREVENTION AND CONTROL.

23 (a) IN GENERAL.—The Federal Fire Prevention and
24 Control Act of 1974 (15 U.S.C. 2201 et seq.) is amended by
25 adding at the end the following new sections:

1 "LISTINGS OF CERTIFIED PLACES OF PUBLIC

2 ACCOMMODATION

3 "SEC. 28. (a) SUBMISSIONS BY STATES.—(1) Not later
4 than 1 year after the date of the enactment of this section,
5 each State shall, under procedures formulated by the Direc-
6 tor, submit to the Director a list of those places of public
7 accommodation affecting commerce located in the State
8 which the Governor of the State or his designee certifies
9 meet the requirements of the guidelines described in section
10 29.

11 "(2) The Director shall formulate procedures under
12 which each State shall periodically update the list submitted
13 pursuant to paragraph (1).

14 "(b) COMPILATION AND DISTRIBUTION OF MASTER
15 LIST.—(1) Not later than 60 days after the expiration of the
16 1-year period referred to in subsection (a), the Director shall
17 compile and publish in the Federal Register a national master
18 list of all of the places of public accommodation affecting
19 commerce located in each State that meet the requirements
20 of the guidelines described in section 29, and shall distribute
21 such list to each agency of the Federal Government and take
22 steps to make the employees of such agencies aware of its
23 existence and contents.

24 "(2) The Director shall periodically update the national
25 master list compiled pursuant to paragraph (1) to reflect

1 changes in the State lists submitted to him pursuant to sub-
2 section (a), and shall periodically redistribute the updated
3 master list to each agency of the Federal Government.

4 “(3) For purposes of this subsection, the term ‘agency’
5 has the meaning given to it under section 5701(1) of title 5,
6 United States Code.

7 “FIRE PREVENTION AND CONTROL GUIDELINES FOR
8 PLACES OF PUBLIC ACCOMMODATION

9 “SEC. 29. (a) CONTENTS OF GUIDELINES.—The guide-
10 lines referred to in sections 28 and 30 consist of—

11 “(1) a requirement that hard-wired, single-station
12 smoke detectors be installed in accordance with Na-
13 tional Fire Protection Association Standard 74 in each
14 guest room in each place of public accommodation af-
15 fecting commerce; and

16 “(2) a requirement that an automatic sprinkler
17 system be installed in accordance with National Fire
18 Protection Association Standard 13 or 13-R, whichev-
19 er is appropriate, in each place of public accommoda-
20 tion affecting commerce except those places that—

21 “(A) are 2 stories or lower;

22 “(B) have no guest rooms adjoining interior
23 corridors; and

24 “(C) have immediate exterior egress from
25 rooms to a ground level area.

“(b) EFFECT ON STATE AND LOCAL LAW.—The provisions of this section shall not be construed to limit the power of any State or political subdivision thereof to implement or enforce any law, rule, regulation, or standard concerning fire prevention and control.

6 “(c) DEFINITIONS.—For purposes of this section, the
7 following definitions shall apply:

8 “(1) The term ‘smoke detector’ means an alarm
9 that is designed to respond to the presence of visible or
10 invisible particles of combustion.

“(2) The term ‘automatic sprinkler system’ means an electronically supervised, integrated system of piping to which sprinklers are attached in a systematic pattern, and which, when activated by heat from a fire, will protect human lives by discharging water over the fire area, and by providing appropriate warning signals (to the extent such signals are required by Federal, State, or local laws or regulations) through the building’s fire alarm system.

20 "DISSEMINATION OF FIRE PREVENTION AND CONTROL
21 INFORMATION

22 "SEC. 30. The Director, acting through the Administra-
23 tor, is authorized to take steps to encourage the States to
24 promote the use of automatic sprinkler systems and automat-
25 ic smoke detection systems, and to disseminate to the maxi-
26 mum extent possible information on the life safety value and

1 use of such systems. Such steps may include, but need not be
2 limited to, providing copies of the guidelines described in sec-
3 tion 29 and of the master list compiled under section 28(b) to
4 Federal agencies, State and local governments, and fire serv-
5 ices throughout the United States, and making copies of the
6 master list compiled under section 28(b) available upon re-
7 quest to interested private organizations and individuals.”.

8 (b) DEFINITIONS.—(1) Section 4 of the Federal Fire
9 Prevention and Control Act of 1974 (15 U.S.C. 2203) is
10 amended by redesignating paragraphs (4), (5), (6), and (7) as
11 paragraphs (5), (6), (7), and (8), respectively, and by inserting
12 immediately after paragraph (3) the following new paragraph:

13 “(4) ‘Director’ means the Director of the Federal
14 Emergency Management Agency;”.

15 (2) Section 4 of such Act (as amended by paragraph (1))
16 is further amended by redesignating paragraphs (7) and (8) as
17 paragraphs (8) and (9), respectively, and by inserting immedi-
18 ately after paragraph (6) the following new paragraph:

19 “(7) ‘place of public accommodation affecting
20 commerce’ means any inn, hotel, or other establish-
21 ment not owned by the Federal Government that pro-
22 vides lodging to transient guests, except that such term
23 does not include an establishment treated as an apart-
24 ment building for purposes of any State or local law or
25 regulation or an establishment located within a building

1 that contains not more than 5 rooms for rent or hire
2 and that is actually occupied as a residence by the pro-
3 prietor of such establishment;”.

4 SEC. 4. ADHERENCE TO FIRE SAFETY GUIDELINES IN ESTAB-
5 LISHING RATES AND DISCOUNTS FOR LODGING
6 EXPENSES.

7 (a) AMENDMENT TO TITLE 5.—Subchapter I of chapter
8 57 of title 5, United States Code, is amended by inserting
9 immediately after section 5707 the following new section:

10 “§ 5707a. Adherence to fire safety guidelines in establish-
11 ing rates and discounts for lodging expenses

12 “(a) Studies or surveys conducted for the purposes of
13 establishing per diem rates for lodging expenses under this
14 chapter shall be limited to places of public accommodation
15 that meet the requirements of the fire prevention and control
16 guidelines described in section 29 of the Federal Fire Preven-
17 tion and Control Act of 1974. The provisions of this subsec-
18 tion shall not apply with respect to studies and surveys that
19 are conducted in any jurisdiction that is not a State as de-
20 fined in section 4 of the Federal Fire Prevention and Control
21 Act of 1974.

22 “(b) The Administrator of General Services may not in-
23 clude in any directory listing lodging accommodations any
24 hotel, motel, or other place of public accommodation that
25 does not meet the requirements of the fire prevention and

1 control guidelines described in section 29 of the Federal Fire
2 Prevention and Control Act of 1974.

3 “(c) The Administrator of General Services shall include
4 in each directory listing lodging accommodations a descrip-
5 tion of the access and safety devices, including appropriate
6 emergency alerting devices, which each listed place of public
7 accommodation provides for guests who are hearing-impaired
8 or visually or physically handicapped.

9 “(d) The Administrator of General Services may take
10 any additional actions he deems appropriate to encourage
11 employees traveling on official business to stay at places of
12 public accommodation that meet the requirements of the fire
13 prevention and control guidelines described in section 29 of
14 the Federal Fire Prevention and Control Act of 1974.”.

15 (b) CLERICAL AMENDMENT.—The table of sections at
16 the beginning of chapter 57 of title 5, United States Code, is
17 amended by inserting immediately after the item relating to
18 section 5707 the following new item:

“5707a. Adherence to fire safety guidelines in establishing rates and discounts for
lodging expenses.”.

19 (c) EFFECTIVE DATE.—The amendments made by this
20 section shall take effect 60 days after the date of the publica-
21 tion in the Federal Register of the master list of certified
22 places of public accommodation maintained by the Director of
23 the Federal Emergency Management Agency pursuant to

1 section 28(b) of the Federal Fire Prevention and Control Act
2 of 1974 (as added by section 3 of this Act).

3 SEC. 5. ESTABLISHMENT OF APPROVED ACCOMMODATIONS
4 PERCENTAGE FOR FEDERAL AGENCIES.

5 (a) APPROVED ACCOMMODATIONS PERCENTAGE.—

6 (1) IN GENERAL.—Section 5707 of title 5, United
7 States Code, is amended by adding at the end the fol-
8 lowing new subsection:

9 “(d)(1) Each agency shall ensure that its approved ac-
10 commodations percentage for a fiscal year shall be not less
11 than—

12 “(A) 65 per centum, for the first fiscal year that
13 begins 4 years after the date of the enactment of this
14 subsection;

15 “(B) 75 per centum, for the second fiscal year
16 that begins 4 years after the date of the enactment of
17 this subsection; and

18 “(C) 90 per centum, for the third and each subse-
19 quent fiscal year that begins 4 years after the date of
20 the enactment of this subsection.

21 “(2) In this subsection, an agency’s ‘approved accom-
22 modations percentage’ for a fiscal year is the percentage de-
23 termined by multiplying 100 by the quotient of—

24 “(A) the total number of nights spent by civilian
25 employees of the agency (as described in section

1 5702(a)) for which payment was made under this chap-
2 ter for lodging expenses incurred in any State at any
3 approved hotel, motel, or other place of public accom-
4modation not owned by the Federal Government; di-
5 vided by

6 “(B) the total number of nights spent by such em-
7 ployees for which payment was made under this chap-
8 ter for lodging expenses incurred in any State at any
9 hotel, motel, or other place of public accommodation
10 not owned by the Federal Government.

11 “(3) For purposes of this subsection, a hotel, motel, or
12 other place of public accommodation is approved if it meets
13 the requirements of the fire prevention and control guidelines
14 described in section 29 of the Federal Fire Prevention and
15 Control Act of 1974.

16 “(4) For purposes of this subsection—

17 “(A) the term ‘agency’ does not include the gov-
18 ernment of the District of Columbia; and

19 “(B) the term ‘State’ means any State, the Dis-
20 trict of Columbia, the Commonwealth of Puerto Rico,
21 the Virgin Islands, the Canal Zone, Guam, American
22 Samoa, the Trust Territory.”.

23 (2) CONFORMING AMENDMENT.—Section 5701 of
24 such title is amended in the matter preceding para-
25 graph (1) by striking “For the purpose” and inserting

1 “Except as otherwise provided in section 5707(d), for
2 the purpose”.

3 (b) GAO AUDIT OF AGENCY COMPLIANCE.—Not later
4 than 6 months after the last day of the first fiscal year during
5 which lodging expenses are subject to the requirements of
6 section 5707(d) of title 5, United States Code, as added by
7 subsection (a), and not later than 6 months after the last day
8 of every other fiscal year thereafter, the Comptroller General
9 shall conduct an audit of the compliance of agencies with the
10 requirements of section 5707(d) of title 5, United States Code
11 (as added by subsection (a)), and shall submit a report to
12 Congress describing the results of such audit.

13 SEC. 6. PROHIBITING FEDERAL FUNDING OF CONFERENCES
14 HELD AT NON-CERTIFIED PLACES OF PUBLIC
15 ACCOMMODATION.

16 (a) IN GENERAL.—No Federal funds may be used to
17 sponsor or fund in whole or in part a meeting, convention,
18 conference, or training seminar that is conducted in, or that
19 otherwise uses the rooms, facilities, or services of, a place of
20 public accommodation that does not meet the requirements of
21 the fire prevention and control guidelines described in section
22 29 of the Federal Fire Prevention and Control Act of 1974
23 (as added by section 3(a) of this Act).

24 (b) WAIVER.—

1 (1) IN GENERAL.—The head of an agency of the
2 Federal Government sponsoring or funding a particular
3 meeting, convention, conference, or training seminar
4 may waive the prohibition described in subsection (a) if
5 the head of such agency determines that a waiver of
6 such prohibition is necessary in the public interest in
7 the case of such particular event.

8 (2) DELEGATION OF AUTHORITY.—The head of
9 an agency of the Federal Government may delegate
10 the authority provided under paragraph (1) to waive
11 the prohibition described in subsection (a) and to deter-
12 mine whether such a waiver is necessary in the public
13 interest to an officer or employee of the agency if such
14 officer or employee is given such authority with respect
15 to all meetings, conventions, conferences, and training
16 seminars sponsored or funded by the agency.

17 (c) NOTICE REQUIREMENTS.—

18 (1) ADVERTISEMENTS AND APPLICATIONS.—(A)
19 Any advertisement for or application for attendance at
20 a meeting, convention, conference, or training seminar
21 sponsored or funded in whole or in part by the Federal
22 Government shall include a notice regarding the prohi-
23 bition described in subsection (a).

24 (B) The requirement described in subparagraph
25 (A) shall not apply in the case of an event for which a

1 head of an agency of the Federal Government, pursu-
2 ant to subsection (b), waives the prohibition described
3 in subsection (a).

4 (2) PROVIDING NOTICE TO RECIPIENTS OF
5 FUNDS.—(A) Each Executive department, Government
6 corporation, and independent establishment providing
7 Federal funds to non-Federal entities shall notify re-
8 cipients of such funds of the prohibition described in
9 subsection (a).

10 (B) In subparagraph (A), the terms “Executive
11 department”, “Government corporation”, and “inde-
12 pendent establishment” have the meaning given such
13 terms in chapter 1 of title 5, United States Code.

14 (d) EFFECTIVE DATE.—The provisions of this section
15 shall take effect on the first day of the first fiscal year that
16 begins after the expiration of the 425-day period that begins
17 on the date of the publication in the Federal Register of the
18 master list referred to in section 28(b) of the Federal Fire
19 Prevention and Control Act of 1974 (as added by section 3 of
20 this Act).

21 **SEC. 7. WAIVER OF FEDERAL LIABILITY.**

22 In any action for damages resulting from a fire at a
23 place of public accommodation, the Federal Government may
24 not be found liable for the death of or injury to any person or
25 damage to any property because an officer or employee of the

1 Federal Government was negligent in carrying out any re-
2 quirement under this Act or the amendments made by this
3 Act.

Passed the House of Representatives November 17,
1989.

Attest:

DONNALD K. ANDERSON,

Clerk.

By DALLAS L. DENDY, JR.,

Assistant to the Clerk.

STATEMENT OF HON. SHERWOOD L. BOEHLERT, U.S.
REPRESENTATIVE FROM NEW YORK

Mr. BOEHLERT. Thank you very much, Mr. Chairman and Mr. McCain.

Thank you for giving me this opportunity to testify. I am extremely grateful for your taking up in a very timely manner H.R. 94. Too often members of Congress, like most Americans, try to ignore or trivialize the threat of fire. We pretend we are immune to tragedy and as a result we court tragedy.

The U.S., as you have indicated, has the worst fire loss record in the industrialized world. The April 6th hotel fire in Miami, which killed three elderly residents, was just the most recent reminder that fire is more than a theoretical danger.

The preliminary investigation of the Miami fire concluded that sprinklers would have prevented the deaths in the building, which was made of concrete and equipped with smoke detectors. This conclusion was no surprise. It is the conclusion after virtually every hotel fire.

A few states have gotten the message. Your home state of Nevada, for example, passed a law requiring all hotels, old and new, to install sprinklers after the MGM Grand fire.

But I do not think we should have to wait for a spectacular fire in each of the 50 states before we improve fire protection nationwide. H.R. 94 is an attempt to encourage such nationwide improvement.

Notice I say encourage, not require. The bill before you is the product of two and a half years of compromise and negotiation with every conceivable interested group and represents an extremely moderate approach. H.R. 94 does not tell hotels what to do. It tells the Federal Government where to spend the taxpayers' money.

Current Federal policy amounts to a public subsidy for unsafe hotels. That is not fair to Federal employees, and it is not good policy for the American public. H.R. 94 would gradually wean questionable hotels from the Federal travel dollar.

In taking this step the Federal Government will be doing nothing more than following precedents set by industry and by earlier Federal actions. Several companies, most notably CIGNA, no longer allow their employees to stay at un-sprinklered hotels, and the Federal Government has used its purchasing power to encourage the use of safety equipment in the past, most notably in buying only cars with seat belts in the early sixties.

Sprinklers are the safety belts of the hotel industry, the piece of equipment that industry kept fighting until it became too clear that nothing else came close to providing the same margin of safety.

Despite what you may hear today, there are plenty of people in the hotel industry who agree with this assessment. Sheraton, for example, is requiring all its hotels to install sprinklers by this year. That includes many small, two-story properties, and in each case the cost is being shouldered by the individual franchisee, not the parent corporation.

Sheraton had tried other methods first: fireproof upholstery, employee training, concrete construction, but finally concluded that nothing else worked nearly as well as sprinklers.

Now, notice I have compared sprinklers to seat belts and not to air bags. Sprinklers are not some expensive, exotic technology. Testimony we received indicated that a hotel can be retrofitted with sprinklers for about the cost of installing new carpet, and the cost can be recouped through lower insurance rates in as few as five years.

The industry knows sprinklers are worth the small extra costs. Ask Holiday Inn, for example, if they install sprinklers in their new hotels despite the claims they make for their concrete construction.

So, the argument for H.R. 94 comes down to this. The Federal Government has it within its power to make hotels safer places to stay, something beyond the capability of the individual traveler.

Do we use the \$1.5 billion a year spent on Federal travel to protect Federal employees and foster safety improvements or do we reconvene after each tragic fire, shake our heads, mumble our condolences and pretend the fire was a complete surprise that we were powerless to prevent?

The first Federal sprinkler bill was proposed in the 1940s after a disastrous fire. How many more Americans have to die before we take simple, affordable, obvious steps to encourage fire safety?

Mr. Chairman, you gave us the answer to that question at the Fire Institute Dinner last night, and I can think of no better way to close than with your words. "H.R. 94 is a bill whose time has come."

Thank you, Mr. Chairman.

Senator BRYAN. Thank you very much, Representative Boehlert.

We are also delighted this morning to have a co-sponsor of the legislation with us, Congressman Doug Walgren who represents the 18th Congressional District in the State of Pennsylvania, Chairman of the Subcommittee on Science, Research and Technology of the Committee on Science, Space and Technology.

Congressman Walgren, it is a pleasure to have you here this morning.

STATEMENT OF HON. DOUG WALGREN, U.S. REPRESENTATIVE FROM PENNSYLVANIA

Mr. WALGREN. Thank you very much, Senator Bryan. It is certainly an honor to join Sherry Boehlert and Curt Weldon in providing, by our presence and in many ways through their words, support for this bill as you consider it here in the Senate.

It was my honor to be the Chairman of the subcommittee on the House side that had the original jurisdiction over this bill. It was largely through Congressman Boehlert's recognition of the importance of this legislation that it was clear that we have both sides of the aisle together on the House side. And as we worked this bill, as Senator McCain has recited the history of the legislation, we feel that we have given a great effort to take account of the various interests that are involved, and at some point in this legislative process, when you really address a concern and take account of it in a

constructive way, I hope that our legislative product will have a good recommendation to you as you consider it here on the Senate side.

This whole area of fire is such an enigma. I remember the original focus that we had on fire in our subcommittee was in the aftermath of the Dupont Plaza fire, as Senator McCain and Congressman Boehlert cited. And it was so striking, and all the lessons were there, that there had not been a death in a properly sprinklered facility, and yet in this instance 97 people lost their lives in twelve minutes from the time of significant burning.

As Congressman Boehlert has said, we always avoid the recognition of our own vulnerability to fire. It is always something that happens to somebody else. In my instance, I have small children and I read them story books which have pictures of people jumping out of buildings into nets with the fire trucks rushing up, and nothing could be further from the truth of the reality of a fire than the idea that you jump out of a building and escape from it.

In many ways, as you know, it is not the fire that kills, it is the smoke. In Bethlehem, Pennsylvania we had a fire in a hotel, over a year ago, where a woman had left a travel iron on in her room which ignited the ironing board and caused a fire in that room. She escaped. She saw the fire and escaped. Five other people in rooms on that floor, none of which were involved in fire in any way—there was no fire in their room—they all died. They died from smoke.

Somehow or other we have to come to grips with the reality that it is smoke that kills. No matter how good the detector is in their room, the way that we can prevent them from being trapped by smoke is to prevent the smoke in the first place, and that of course is what sprinklers are absolutely effective in doing.

I was really moved by the dinner last night and the singing of "America the Beautiful," and particularly that line in there about "crown thy good with brotherhood," and in that context the immediate question was, what do we mean by "brotherhood"? What do we do for each other? What is this concern that we have a right to expect from each other?

In the aftermath of the Dupont Plaza Hotel fire I got a letter from the son of a woman who was killed in that fire, and he said that it was the last thing in the world that they expected when she went on that vacation to a very modern hotel. I mean, this was no—this was no way-stop on the way to some place. This was a modern hotel in American commerce, and that son made clear the expectation that they had that they would have been protected by reasonable fire protection systems. And they were not.

The public I think now has an expectation that certainly the significant commercial establishments in our society will protect them from what we cannot, as human beings, expect us to think about all the time, and when it comes to hotels and motels, that means sprinklers. When I think of the Federal employees, in a way and what that concept of brotherhood is, that is the least we can do for them—to provide them a fire-safe accommodation when they are on the Nation's business.

Now, indirectly that will be a very powerful incentive in our communities for the range of hotels and motels to live up to a

standard that we know they can reach. As Congressman Boehlert said, it is no more expensive than carpeting the floors or redecorating the rooms, which we know they do to remain competitive.

We know, too, that it is a system that pays for itself over a period of five years. The return is absolute on lowered insurance risk and rates, and so it is not something unreasonable that we are asking people to do. It is something that people literally, now that we know how effective sprinklers are, expect in the ordinary course of business.

So it is time that we caught up, and as Senator Bryan said last night, this is a measure whose time has come, and I think, thinking back on what we owe to each other, we owe to each other to give this our fullest attention legislatively.

With the support that the Congressional Fire Service Caucus has brought to this issue and the attention that has developed through Congressman Weldon's organizing the Fire Caucus, I cannot believe that in both the House and the Senate that we will be found wanting. And so I just wanted to come and personally encourage you in your deliberations on this side in every way that I could. I appreciate the opportunity to appear.

Senator BRYAN. Thank you very much, Congressman Walgren. We appreciate your testimony.

I suppose it would be fair to say that no hearing on a measure involving fire protection, or fire safety, would be complete with the Chairman of the Congressional Fire Services Caucus, who presided over last night's dinner ably and very successfully.

Congressman Curt Weldon is from the 7th District in Pennsylvania, and is a former fire fighter himself. We are delighted to have you with us this morning, Congressman.

STATEMENT OF HON. CURT WELDON, U.S. REPRESENTATIVE FROM PENNSYLVANIA

Mr. WELDON. Thank you, Mr. Chairman.

I would like to first of all applaud you for your aggressive leadership role in chairing this very important Subcommittee, and also accepting a co-chairmanship of the Congressional Fire Services Caucus along with our good friend Senator John McCain.

You have already indicated, both personally to me and publicly, your support for life safety issues, and we appreciate that leadership role and we are happy to have you receive that award last evening.

Senator McCain, you have been a real friend of the fire service. I do not have to tell you that. I think a comment that you made that perhaps was not picked up by everyone in this room is your concern for smoke detectors for individuals that have hearing problems. That is well known in the industry Nationwide and we appreciate that interest and your on-going efforts in working with the industry to find successful ways to alert people that have special handicaps and disabilities to the problems associated with fire peril.

Let me also commend my two colleagues here. Without their leadership we would not be here today. Doug Walgren and Sherry Boehlert have been outstanding leaders for as long as they have

been in Congress on issues involving life safety and fire protection, and I think one only has to look at the response of the dinner last evening to see very clearly that this Nation's fire service is solidly behind this effort.

As you are well aware, Mr. Chairman, last night we had over 2,000 people, leaders from every State in the Union, representing not just firefighters, fire chiefs, fire protection engineers, arson investigators, fire marshals, but also industry groups—American Petroleum Institute, chemical manufacturers, the American Insurance Association. They came together to focus on the problems and concerns that this Nation has. America has the worst fire loss record of any industrialized nation in the world. That is a terrible record for America.

We have tended in the past only to focus on these concerns when there is a national tragedy, like the MGM Hotel fire or as we saw in a hotel-motel conference center in New York some years ago, or the Beverly Hills Supper Club in Kentucky, or the Happy Land Social Club just recently in New York City, or the high-rise senior citizen complex in Florida, or the nursing homes in Virginia and Tennessee, where we had multiple fire loss deaths.

What we have tried to do is to raise the issue on an on-going basis, and say that we cannot just look at this issue when there is a tragedy, but must address it on a continuing basis.

This bill is unique. This bill does not force anyone to do anything in the private sector. It says to our Federal agencies and our Federal operations that this is something we want you to consider and to abide by in the course of your work as Federal employees in terms of where you will stay. It is not something new. As was cited by Congressman Boehlert, industry has already moved in this direction, and in many cases is already requiring employees within industry groups to stay in buildings that are properly sprinklered. What we are doing is setting the example.

This is a unique bill also, because what I have found in the three, three-and-a-half years I have been in Washington is that sometimes Congress tends to want industry to do things that it will not do for itself.

I am happy to report to you, Mr. Chairman, that within the last two years the Architect of the Capitol has realized that sprinklers are an important part of fire suppression. Every major building on Capitol Hill is currently being retrofitted to include sprinkler protection.

If you walk through the halls of the Longworth House Office Building, you will see new sprinklers being installed in the hallway of each floor, in the storage areas of each member's office, because the Architect of the Capitol and the Fire Protection Engineering Office in Washington has recognized that we must set the tone.

So this is not a case where we are asking industry to do something that we ourselves are not doing. In fact, we have done the reverse. We are setting the tone. We are out front demonstrating that sprinklers are in fact extremely important to protecting lives and property.

In terms of this legislation, I think an important consideration is that we are not just protecting the lives of the occupants of the

building. What we are also doing is protecting the lives of those men and women who have to respond to these emergencies.

Mr. Chairman, I am sure that you recognize that by far and away, the loudest applause at last evening's dinner was when you announced that you would be holding hearings and efforts to move forward H.R. 94 in your committee—an overwhelming response across the room.

Because this is an important priority of these men and women, two million strong, who are out there as volunteers and paid fire fighters who have to risk their lives to go in and save other people in buildings that do not even meet the most basic fire protection and life safety codes in this Nation.

So we are not just talking about the people who inhabit these buildings. And obviously that is of prime importance. But we are talking about those men and women that have to respond to these emergencies, that have to go in there and rescue these individuals, when perhaps the fire has gotten well beyond the point of control.

And we are also doing this because they feel that it is a priority. We are sending a strong signal to America that we are serious about the problem of fire, that we are serious about the concerns of the loss of life that have occurred around this Nation in our major cities, in our hotels and motels.

But we are also concerned about the loss of life in our nursing homes, in our multi-use occupancy buildings, that do not properly meet the codes that have been set forth by groups like the NFPA.

I think it is an example of how we can work effectively to encourage constructive change in our society, working, once again, with industry.

This bill does not suggest that sprinklers are the end-all and cure-all of our life safety concerns. That is nowhere mentioned in this bill. We are not saying that there is not a role, as Senator McCain so eloquently pointed out, for the concerns dealing with toxicity of materials.

And there are industry groups that have made tremendous efforts in that area, and they must be recognized for that. There are other industry groups who have used the technique of balanced design construction, to use building materials as a way, also, of controlling the possibility of smoke and toxic spread, as well as flame spread.

But there is no one in this country that I know of who would dare come before this committee and testify that sprinklers are not in fact a key part of that process. We are setting that example with this legislation. I am asking for your consideration.

And I can tell you that the national fire service has mustered its support and are going to be using its influence to support your efforts in this committee to see a bill pass the Senate. They want us to take it to the President and have him sign it into law, hopefully by midsummer.

So I thank you for your consideration. I thank you for your leadership, Senator McCain, and for your friendship, and the fire service also thanks you.

Senator BRYAN. Congressman Weldon, we appreciate your testimony. We know that each of you have previous commitments in

your respective responsibilities in the House, and thank you very much for your attendance.

Senator McCAIN. Mr. Chairman.

Senator BRYAN. Yes, I will yield to Senator McCain.

Senator McCAIN. Could I just ask one question of our distinguished friends from the other side, because they have had extensive hearings on this issue, and I would just like to ask their comments.

Further testimony by one of the witnesses today will make the argument that with proper construction of hotels and motels you avoid the requirement for sprinkler systems. That you can effectively prevent fires by the kind of proper planning, design and construction using fire-resistant materials, and therefore, if you have that, you do not need the unnecessary financial burden of installing sprinklers.

I am sure that issue must have come up in your hearings, and maybe you could answer that, if you do not mind, Mr. Chairman, because I would appreciate their views. And again, I very much appreciate all three very eloquent statements.

Mr. WALGREN. If I could respond briefly. You cannot retrofit proper construction. You cannot rebuild these buildings that are already there. You can retrofit sprinklers very easily. And so, with this kind of requirement, we are going to see present construction made fire safe that we would never see, except in the 100-year life cycle of these buildings, if we were to rely solely on the building engineering aspect.

As Congressman Weldon said, this in no way undercuts the importance of that kind of construction, when it can be done. But we have present structures that will be in use for the next 75 years that must be made fire safe.

Mr. BOEHLERT. If I may add. Let me point out that the Dupont Plaza Hotel was of concrete construction. And secondly, the overwhelming sentiment within the industry is that balanced design is very helpful and important, but there is no substitute for sprinklers. Even Holiday Inn, which was championing the balanced design construction earlier, will probably testify before this committee that in all its new facilities it installs sprinklers.

Senator McCAIN. Thank you very much, Mr. Chairman.

Mr. WELDON. If I might add one other point to that, Mr. Chairman. I think one of the most ridiculous statements that I have heard in Washington since I have been here was echoed by one of the assistants of the architect of the Capitol the day following the fire in the Speaker's office some two years ago, to which I happened to be the second person arriving on the scene, because his office's were two doors from my office in the Longworth building.

The fire burned out of control. It burned out what had been the kitchen area of Speaker Wright's office and did extensive damage to the whole suite. After I had said that the building has violated every fire code in America, the number two person in the architect's office, who has since retired, stood before the national media and claimed that these buildings are fireproof, because they are made of concrete and marble and masonry.

Mr. Chairman, the building is not the problem. It is the contents and the materials inside of the building. That is what burns.

Now, certainly, we have to give credit for efforts made, as Senator McCain pointed out, to flammability and toxicity of materials. But you can never remove or control all of those materials introduced in a given room, whether it be the materials you bring in your briefcase, your clothing, your personal belongings, the data equipment, whatever it happens to be, you can never totally control that.

The only proper way that I think you can deal with that is certainly through a coordinated effort. Construction is critical in new buildings. And having worked for an insurance company for 10 years in the area of risk reduction and assessing buildings for their susceptibility to fires, I can tell you that we gave heavy emphasis to that, as we did to flammability.

But we gave the top priority to the installation and use of automatic sprinklers. Because we knew, as industry officials insuring those properties, that there was nothing that compared to the use of automatic sprinklers in buildings that we insured.

Thank you.

Senator BRYAN. Thank you very much, Congressman Weldon. We appreciate your testimony. And I know that you all have to run off to other things. I will yield to Senator Pressler for an opening statement or a question to the panel if he has either or both.

Senator PRESSLER. I know that a good chairman keeps meetings moving, and guys like me show up late and want to ask a question. I think we are very lucky to have these outstanding witnesses here today. And from the extensive hearings they have held on the House side, I wanted to say that I think we can learn a great deal.

I am certainly very concerned about safety. I am also concerned about small business. And we are going to hear later from a lawyer from Aberdeen, SD who has a different point of view. Are there other technologies to save lives other than sprinkling? You know this is an expensive proposition before us.

Did you find in your hearings that there are any other potential technologies that can deal with this problem? Or are sprinklers the only technology?

Mr. WELDON. The comment was made earlier that, according to the National Fire Protection Association, there has been no multiple loss of life in any building that properly met their standard for life safety in sprinklers, NFPA-13.

The National Fire Protection Association is an industry consensus group made up of the hotel/motel industry, manufacturers, large employers, as well as engineers, the general public, and the fire protection community. NFPA has developed consensus standards, the life safety code NFPA-101, and the sprinkler code, NFPA-13, both of which attest to the fact that when you properly install sprinklers, there is no better protection.

Certainly smoke detectors are critical for early alert and getting an early warning to the occupants of a building. Certainly construction is critical. And there are regulations and standards dealing with construction. Certainly those concerns have to be taken into consideration. But if I had to say, is there anything that can equal sprinkler protection? I would have to say no.

Perhaps there will be others that disagree with me, but I think when you listen to the experts, the people who are working on

these consensus standards, they will say the same thing. And perhaps the most important thing is to look at what the industry is doing. I know of no major industry today building facilities that does not install automatic sprinklers where there is a possibility of a threat to the loss of life.

Thank you.

Mr. BOEHLERT. And, Senator, I might add, we obviously are concerned about costs, too. And we received extensive testimony that the cost of installing sprinkler systems equals about the cost of installing carpets, which the facilities covered under this legislation do on a regular basis.

And secondly, from the insurance industry, we received testimony that indicated, as a result of lower premiums which would come because they have a fire safer structure, the payback period is in the neighborhood of five years.

Mr. WELDON. In addition, by codes, when a sprinkler system is installed it oftentimes gives the architect and the design consultant for the building the ability to make other savings in the construction of that facility. They are called tradeoffs. So, by installing sprinklers, it is also possible for the owner of that building to achieve other savings which they also must acknowledge.

And if industry is honest with you they will tell you that.

Mr. WALGREN. And if I might just add one other thought that I am thinking was missing. In a real sense, we are not breaking new ground here. The industry already broke the ground for us, as Congressman Boehlert has said, Holiday Inn and Sheraton Inns, but most importantly Marriott was the first one to really require comprehensive sprinkling in their hotels. And they deserve a tremendous amount of credit for that.

Senator BRYAN. Gentlemen, we appreciate your testimony very much. Thank you. And I know that you have other commitments on the other side. And we will let you go now.

Thank you very much.

Senator Pressler, I would certainly defer to you now if you would like to make an opening statement in addition to the questions that you had of the first panel of our witness.

Senator PRESSLER. Thank you.

And why does not the next panel get into place while I am doing this.

Senator BRYAN. All right. The next panel consists of Mr. Edward M. Wall, Deputy Administrator, U.S. Fire Administration, Federal Emergency Management Agency. We welcome Mr. Wall.

Senator Pressler.

Senator PRESSLER. I would ask unanimous consent to put in the record at this point a letter from Larry Fisher, a South Dakota fire chief and Vice President of the International Association of Fire Chiefs, concerning H.R. 94. He made an excellent point when he wrote, "I do not feel that H.R. 94 is justifiable for smaller properties which are in compliance with codes that, in fact, have originally made these buildings very safe. Because of their layout and size, in most cases, can be completely evacuated from the most remote area of the building in as little as a minute."

I ask that that letter from Mr. Fisher be included as part of the record.

Senator BRYAN. That letter will be included and made a part of the record.

Senator PRESSLER. Mr. Chairman, I do not know if I will vote for or against this legislation. At this time I am still studying it. But I do want to be sure that we have the points of view of small business included.

I have a statement of some of the concerns of smaller business. Of course, I am very concerned about safety and saving lives. I am very concerned about doing what is right here. But I want to be sure that this is not one of those instances when we do something mechanically and apply it universally to everybody without considering the impact it has, the cost. But, of course, the most important thing is the saving of lives.

And, Mr. Chairman, finally I am very proud to have a witness from South Dakota here, Mr. Bowen, who I believe is one of our last witnesses.

Senator BRYAN. He is indeed.

Senator PRESSLER. I may have to come and go, but I look forward to hearing him speak on behalf of the Super 8 Motels, Incorporated, a business we are very proud of in my state.

Senator BRYAN. Thank you very much, Senator Pressler.

Mr. Wall, welcome to our subcommittee hearing this morning, and we will hear from you now.

**STATEMENT OF EDWARD M. WALL, DEPUTY ADMINISTRATOR,
U.S. FIRE ADMINISTRATION, FEDERAL EMERGENCY MANAGEMENT AGENCY**

Mr. WALL. Good morning, Mr. Chairman, Mr. Pressler. In order to save time, sir, with your permission I will just highlight my testimony and—

Senator BRYAN. Your full statement will be made a part of the record, and we would invite your comments now, Mr. Wall.

Mr. WALL. Thank you, sir.

I am Edward Wall. I am the Deputy Administrator and currently the Acting Administrator of the United States Fire Administration. Before joining the Fire Administration in 1980 I served 26 years in the Newark, New Jersey Fire Department, retiring with the rank of Deputy Chief. Now, I welcome this opportunity to appear before your subcommittee today to discuss the Hotel and Motel Fire Safety Act.

Fire, as we all know, is a killer, and it will take thousands of lives in America this year and will destroy billions of dollars worth of property, and that will affect the economic lives of thousands of individuals and communities.

Since the publication of America Burning and the establishment of the United States Fire Administration the loss of life and property due to fire has been reduced quite a bit. But we still have far to go to achieve a level of fire safety common in other parts of the industrialized world.

Our level of fire loss in the United States occurs notwithstanding the fact that the American Fire Service is second to none in fire suppression activities. I think this point was made earlier this

morning, referencing the fire in the Happylands Club in New York City.

The New York City Fire Department, which is an outstanding fire department, was on the scene within three minutes, had the fire extinguished within five, and yet many, many people died on the second floor—not from flames, but from the products of combustion generated by an arson fire started downstairs.

As a nation, several tools are at our disposal to lower the toll of fire. When these tools are applied as part of a system of fire protection measures, great progress can be made in increasing fire safety. Public education to alert individuals and communities to the hazard of fire and to the measures which they could take to protect themselves and their families has been instrumental in decreasing the loss from fire.

The development and enforcement of fire and building codes has aided in the creation of more fire-safe structures and the partnership of private sector interest, the United States Fire Administration and the American Fire Service has been successful over the years in increasing the overall level of fire safety in the United States.

One of the surest means of reducing the tragic loss of life and property due to fire is the deployment of automatic detection and suppression equipment. It has been proven that a quick response fire sprinkler system, used in conjunction with alarm and detection devices and the adoption and enforcement of adequate codes, can help save lives and prevent property loss.

The presence of smoke detectors in approximately 70 percent of the homes in the United States has made a significant impact in recent reductions of loss of life, and residential sprinkler systems which are designed to ensure the survivability of occupants are gaining wider acceptance.

The United States Fire Administration performed the original research that led to the development and practical application of the residential, quick-acting sprinkler head. The Fire Administration continues to perform sprinkler research and to provide assistance, information, and guidance to jurisdictions to foster the installation of sprinkler systems.

Mr. Chairman, today this subcommittee is considering the Hotel and Motel Fire Safety Act. The goals and intention of this legislation to enhance the life safety of the traveling public are commendable, and I applaud you and the sponsors of the bill for addressing this important issue.

In reviewing recent information, it is apparent that many hotels and motels in the industry have recognized the value of automatic detection and fire sprinkler systems. The installation of such systems not only enhances the safety of the traveling public, but also protects corporate capital investments. In recent years several large hotel chains have begun the installation of automatic systems in their properties on a voluntary basis. There is no question that more need to follow suit.

Mr. Chairman, the Federal Emergency Management Agency and the United States Fire Administration applaud the foresight of Congress for addressing the need to increase the fire safety of accommodations for both Federal employees and the general public.

The agency looks forward to working with you and your colleagues in the House of Representatives to address the concerns brought up here in the Senate today.

I would be very pleased, sir, to answer any questions that you may have.

Senator BRYAN. Mr. Wall, we thank you very much for your testimony. Let me ask a couple of questions, and I refer to your prepared testimony which we have made a part of the record.

Much of what you have said this morning and much of what is contained in your prepared statement would seem to be a ringing endorsement for the enactment of this legislation, but at the end of your written statement you seem to damn this measure with faint praise when you go on to express some concerns that you have, and I want to ask you a couple of questions about that, if I may.

Among the concerns FEMA has—and I am paraphrasing your prepared statement—the bill does not limit state and local law concerning fire protection and control. You acknowledge that, but then you go on to say, “The administration believes that the bill should address more clearly state and local prerogatives to adopt different guidelines for smoke detectors and sprinkler systems in response to extenuating local conditions.” What did you have in mind by that statement?

Mr. WALL. Sir, my interpretation of that is that nothing in Federal legislation should hamper the local fire chief from bringing into his community laws or ordinances that may be stricter than Federal law. I do not want to see the local chief hampered in that way.

Senator BRYAN. Well, I happen to agree with you, but would you not acknowledge, Mr. Wall, there is nothing in this legislation that would preclude state and local law enforcement, the fire protection agencies from developing even more stringent guidelines.

Mr. WALL. I thoroughly agree with you, sir.

Senator BRYAN. So, I mean, what do you mean by the statement, “The administration believes the bill should address more clearly state and local prerogatives to adopt different guidelines.” I am not sure where that leads us.

Mr. WALL. These concerns were voiced by the General Services Administration, and in order to have a consistent policy, we were asked to voice those concerns along with our testimony.

Senator BRYAN. I see.

I take it reading between the lines that may not be your own personal view, but being part of the team, that is the view that was shared by another agency that you are reporting to us, Mr. Wall.

Mr. WALL. Yes, sir.

Senator BRYAN. Would it be fair to say that assuming all other factors to be equal that a hotel or motel that is sprinklered would be safer than one that is not sprinklered—assuming all other factors to be equal, construction, smoke detectors, every other factor that may have some relevance to fire safety and protection—the only distinction being one hotel or motel does not have a fire sprinkler system, that one does—that the one that has a fire sprinkler system would be safe. Would that be a fair statement?

Mr. WALL. Sir, let me reflect upon my experience. Before coming to the Federal Government I spent over a quarter of a century in a

very active urban fire department where we had many high-rise hotels and many low-rise hotels. And I can say without any hesitation that you are safer in a sprinklered property than in a non-sprinklered property.

You cannot protect people from themselves. The only way you could ever construct a hotel room that is absolutely fire safe in my estimation would be if you insisted that people sleep on concrete blocks with a nice cement block for a pillow and not bring anything into the room with them.

We bring into our environment what we carry with us. We bring computer tapes with us, we bring lap-top computers, we bring clothing, we bring everything. When we conducted experiments at Factory Mutual or in Underwriters Laboratories to improve sprinkler technology, we insisted that when they burn a typical bedroom that they use furniture and bedding that is approved to be used in hotel rooms.

Senator BRYAN. Mr. Wall, I take it that your answer is that a hotel or motel that has a sprinkler system with the premise that I outlined is safer in your judgment than one that does not.

Mr. WALL. It is.

Senator BRYAN. Let us take it from that premise. Assuming that is true, you go on then to make the observation that the administration believes that Federal agencies should have the discretion to establish the specific percentage of total nights to be spent by Federal employees at the improved lodging that this bill would require.

And I guess my question to you is what is the policy rationale for allowing one agency within the Federal Government to allow its employees to provide accommodations in hotels that by your own definition would be less safe than hotels that have fire sprinklers and yet other agencies within the Federal Government might impose a higher standard. I am having difficulty to understand the policy rationale. You are arguing for discretion of each agency. In effect, why should one agency be able to oppose a standard which provides less protection and safety for its employees who travel?

Mr. WALL. Let me answer it this way, sir. Former FEMA Director Julius Becton, who recently resigned, when we first began to be involved in H.R. 94 put out a memo to all FEMA managers telling them that whether this act was passed or not, he was encouraging FEMA managers to put their people in sprinklered hotels with or without legislation.

Again, this is a concern of the General Services Administration, in order to have consistent administration posture, it is in my testimony.

Senator BRYAN. You can understand as a member of the committee here who is trying to accept and weigh and evaluate the testimony that I applaud Mr. Bechton's policy directive, and it would seem that FEMA employees are going to stay at accommodations that by definition that you and I have just agreed upon would be safer, and yet other employees in other Federal agencies who may have a less enlightened director insofar as safety would be permitted to stay at places that by definition are less safe. I have difficulty following the logic of that, but I think I understand what you are telling me.

Senator BRYAN. If I recall correctly, you were part of the team that went out to the MGM right after that terrible fire in 1980.

Mr. WALL. Yes, sir. We went to the MGM and more recently we were also involved in the Dupont Plaza fire.

Senator BRYAN. I was there the day after that fire, went during the morning and went through all of the carnage and just the disaster there.

My recollection, Mr. Wall, is that at the time that hotel was built the Code required the high-rise part of the structure, where the guest rooms are—where the hotel rooms are, if you will—to be fully sprinklered.

It did not require the casino area, did not require the restaurant area to be sprinklered, under the premise that because those places were open 24 hours a day, somebody would always be there as an employee and some guests as well, and therefore any smoke or any indication that a fire was about ready to break out that it would not remain undetected and would give an opportunity for timely notice and a response. Is my recollection correct on that, Mr. Wall?

Mr. WALL. You are correct, and let me put it in the context of the Dupont Plaza, that I am really more familiar with because I led a Federal team to assist ATF and the FBI in that investigation, and it ties in precisely with what you are saying.

The fire that occurred in the Dupont Plaza took place in a ballroom that was being used to store furniture. They were in the process of renovating, which they do about every five years, but to them renovating meant replacing every stick of furniture, all the rugs—anything that made the room more saleable.

There was a huge stockpile of furniture, well-arranged, very neatly stacked. If you and I walked by it, as very prudent people, we would say it was neat, it was clean. There was nothing wrong with it.

The fire occurred at about 3:00 p.m. in the afternoon. The fire was discovered by an employee, and the employee described to me that the fire was about two-feet high and about two-feet wide [indicating] when I found it, and I said, what actions did you take?

He said, I went out to get a fire extinguisher. When I came back, it was a little bigger, and when I emptied the contents of the fire extinguisher, the fire seemed to spread. He used the wrong type of fire extinguisher. He used a CO2 extinguisher that did nothing but entrap oxygen and make that fire grow larger.

Then another employee came in with a security guard. He too saw the fire. He walked up to the lobby and alerted the people at the front desk that they had better get out of the hotel because there was a fire going in the ballroom area, and the people at the front desk began evacuating. So far, the tenants, who are paying \$186 a day and up, have not been told there is a fire in the hotel. It was something like a comedy of errors.

Then he exited stage left. Stage right, the security guard and another employee came in. They saw the fire. The fire was much larger now. It was touching the ceiling. They stretched a house line—what we call a standpipe line. They stretched the line down a flight of stairs positioned themselves to apply water to the fire, but the house line was leaking and did not work. They abandoned the house line. They, too, left.

Now the people on the upper floors are beginning to smell smoke, and they begin an evacuation of the building without ever being instructed by anyone in charge. The premise that someone is going to see a fire, that someone is going to do the right thing when they see it, and the premise that they are going to successfully extinguish it manually, does not hold water.

Senator BRYAN. Mr. Wall, let me take this MGM situation as I recall it. It seems to me that in the casino area, the general public area, that what occurred was in effect a flashover effect where there was a combustibility that I do not fully understand technically, but people were literally incinerated within seconds there in the casino area.

Mr. WALL. That is correct.

Senator BRYAN. Now, there is going to be some testimony later on this morning that smoke detectors save lives, sprinkler systems save buildings. Could you respond to that comment, if you agree or disagree, and if you do not agree, why you do not agree?

Mr. WALL. Senator, smoke detectors are marvelous devices, but they are passive devices. They tell you that a fire is taking place, and that you or someone else has to do something about it. A sprinkler system, if it is properly wired to a detection system, not only tells you the fire is taking place, but that sprinkler system begins doing something about it, and that something is extinguishing the fire.

In my 25 years in the fire service, if you had a fire in your home, by the time I got there and entered the house, I assure you that when we open up the hose line we would be throwing at least 150 gallons of water a minute into your room.

When two sprinkler heads go off, they throw about 26 gallons of water a minute into your room, usually directly where the fire is taking place, put the fire out, and then the fire service comes in and does the mop-up and assures the evacuation of guests or what have you. Sprinkler systems are effective.

We did a study on a recent rash of fires in six or seven nursing homes, one of which took place in Roanoke, Virginia, and all the nursing homes were built to code. They were made of fire-resistant construction, they had adequate staff, and in each of the fires that took place where the buildings were not sprinklered, there were multiple fatalities. In each of the fires that took place where the buildings were sprinklered, there were no fatalities, and yet the fires had a lot in common, in where they started, how many people were on duty, the age of the occupants and what have you. Sprinklers do work.

Senator BRYAN. Mr. Wall, I thank you very much for your testimony and I would like to yield to Senator Pressler for questions.

Senator PRESSLER. I have no questions.

Senator BRYAN. Mr. Wall, we thank you very much for your testimony today.

Mr. WALL. Thank you, senator.

Senator BRYAN. We begin with our first panel of witnesses, Mr. Rex Jordan, Nevada State Fire Marshal, Mr. Kenneth Lehn, the Northeast Regional Manager of the National Fire Sprinkler Association, and Mr. David Hilton, the First Vice President, International Association of Fire Chiefs.

Gentleman, welcome to Washington.

STATEMENT OF REX JORDAN, NEVADA STATE FIRE MARSHAL,
CARSON CITY, NEVADA

Mr. JORDAN. Thank you, Mr. Chairman.

Senator BRYAN. Mr. Jordan, we will hear from you first. It is nice to have you here with us this morning.

Mr. JORDAN. Thank you very much, Mr. Chairman.

For the record I am Rex Jordan, State Fire Marshal from the State of Nevada, and I would like to offer into the record my prepared testimony.

Senator BRYAN. That will be made a part of the record.

Mr. JORDAN. Thank you very much, senator.

Let me recap a couple of different approaches that we have heard this morning from actual experience. I am not going to go into how many years, because I am a senior citizen and we kind of get a little touchy about that as we get older and older.

Years ago, when I was a volunteer fire chief in another state, not Nevada—I was also a paid fire marshal for the Air Force—we responded to a mutual aid call to a motel, a very large motel, single story motel, and assisted in putting out the fire.

It was built in an area that was not really affected by an active building department or a building code. It was more of a remote area, and it is typical in the United States that these types of buildings are built with very little attention to codes, for whatever reason. The reasons are not really important, but they were built and they are all over the country.

In this case, one of my school chums was a city councilman, and I told him, I said, you know, we put this fire out, but this building has no systems. No fire alarm, no sprinklers. It is wood frame, very large, employs a lot of people. It was next to the State Capitol so it was very active. We had annual sessions.

He said well, if you can prove to me that we really need some changes, I will talk to the city council about it. Well, unfortunately some years later I was State Fire Marshal in that State, and one of my first largest fires was that motel.

The fire department, which was a very good, part paid, part volunteer department, was totally committed to evacuate the occupants. They did not have the manpower to do both. They could not fight the fire and evacuate the occupants. There was no fire alarm system. So they literally had to kick open the doors, get the people out of bed at early morning hours to save their lives. Consequently, by the time all the mutual aid companies rolled in, they had lost the structure.

Now, the economic impact to that community—it was almost a single industry community. There was 300-plus people put out of work. The tax base was destroyed by that loss. It was the largest nonreinsured commercial building in the State at that time, some \$3.5 million loss.

So when people talk about fire protection, I look it from the standpoint of protecting other things, not just human life—that is our first priority, both of the fire service and the occupants and the employees—but also the economics of good fire protection, good

planned fire protection. There is a cost-benefit ratio to fire protection.

I would refer, as I was privileged to speak on the House side on this bill, to Mr. Botts, Fred S. James & Company, who gave us actual, statistical dollar values that were entered into the record. I am not sure if anyone from the industry is here today or not, but I would advise that those comments be reviewed, because the payoff was quicker than what we are normally used to, both in dollar value, and he used retrofitt versus new construction.

The biggest thing that I learned in that testimony was the fact that the standard insurance market will accept a housing unit that is sprinklered, where they may not accept it in a—particularly in a remote area.

After the motel fire, my friend who was the city councilman came to me and he said Rex, I should have listened to you, and I said well, I am sorry you did not, because we had a lot of people at risk, but fortunately we did not have any fatalities.

Nevada just recently experienced a very large truck stop—and if you want to see what happens to a building built to code that houses people, has sleeping accommodations, has a restaurant and a bar, has a big service area for buying trinkets like the UNLV—number one championship basketball team now in the Nation—

Senator BRYAN. That will be noted for the record, Mr. Jordan—highly relevant to the proceeding here today.

Mr. JORDAN. I have a gorgeous T-shirt, but I am just chicken enough, I did not want to wear it this morning.

The owner, when he built the truck stop—this was a large chain. We were glad that he came into Nevada, and our office does plans review on a great many buildings, all the commercial buildings in rural Nevada—asked me if he had to put in sprinklers because he did not have any water supply, and I said well, you should.

You do not have to. The code we have adopted will permit this. This is a not a big enough facility and not enough rooms to be classed as a hotel, but I said you really ought to sprinkler it. It is in an area that is about 30 minutes away from any organized fire protection.

He said well, if I do not have to put it in, I do not want to put in a water tank and all that type of thing. We tried to explain to him that you can put in a very large water tank, in excess of 100,000 gallons, for about \$9,000, put a jockey pump on it, and not worry about it and use just a domestic well to fill it, so it was not a big expense that he had anticipated.

Well, I have a 40-minute tape—a videotape—of a fellow who was there when the fire broke out in the ceiling over the bar from some defective home-made wiring that someone had put in there, as people are prone to do, and it shows what happens to a building built to code in an area that does not have a heavy fire response, and it burned slowly to the ground. Very good videotape.

He is standing out there with my investigators the next day, trying to find the fire cause, and he is standing there counting the vehicles going by—the \$300, \$500, \$500. He was just absolutely beside himself, because in less than one day's time he lost—the business loss was much more than the sprinkler system would have been.

Mr. JORDAN. If I might, Mr. Chairman, I would like to offer a copy of that law and a copy of the Governor's Commission that studied that law.

Nevada's retrofit law is a much more comprehensive law than the Hotel/Motel Act we are considering under H.R. 94. It included business occupancies as well, and it has worked. We have not had a fire loss in a structure that has been brought up to code since the installation of systems, sprinklers and fire alarms. In other words, we need the detection, and we need the protection. They go hand in hand.

We did have a multiple life loss in a two-story fire resistant motel from an act of arson. It killed four people. The hotel was in the process of retrofitting and putting in some systems.

So despite fire resistant construction, it is the toxicity and the fuel load that is just absolutely impossible in our economy to even begin to approach in America except over a very long range period of time.

We had some 33,000 buildings in Nevada inspected as a result of State Senate Bill 214 called the Retrofit Law. Nevada businesses have spent in excess of \$550 million in compliance with this law, and that does not include the state government's expenditures. I would commend particularly our last session, where the Chairman of the Ways and Means Committee stated that if it is for fire and public safety we are going to fund it. So all of the capital improvement projects that are on a three- and six-year plan are being funded to bring up the fire protection for State buildings as well.

We only have 20 buildings that still remain closed or have been demolished out of that 33,000 that have not complied. We did not have one appeal or court challenge to that law. Now that is a credit to Nevada business. It is a credit to the attitudinal posture that all of the fire and insurance engineers in particular worked on, the architects and engineers, to bring us up to code.

We put in our law a provision for industrial bonds to assist businesses that may have a financial hardship. We did not have one application. So all of the moneys came and were generated.

I believe this is a good law. I do not believe we should tinker with it. I think the adjustments will come when the standards are actually written by the fire administration. I would recommend passage, and with that I would stand by for questions.

[The statement follows:]

STATEMENT OF REX JORDAN, REPRESENTING THE STATE OF NEVADA, FIRE MARSHAL
DIVISION

On November 21, 1980, an accidental fire broke out in the 26-story MGM Grand Hotel in Las Vegas. The fire resulted in the deaths of 85 persons and injured another 679. At the time of the fire, there were an estimated 5,000 persons present in the hotel.

On November 24, 1980, just three days after this disastrous fire, a Governor's Blue Ribbon Commission was appointed and charged with a review of all regulations pertaining to fire safety codes in the State of Nevada regulating the construction of highrise buildings and public assembly occupancies to determine the adequacy and effectiveness in protecting the public. It was mandated that this review should extend to evaluation of codes and regulations governing the same classifications of occupancies which had been constructed prior to adoption of the current State Fire Marshal's Regulations, and other adopted codes of the state. Comprising the Com-

mission was a panel of experts in the field of fire protection, building construction and design, elected officials and members of the public.

The Commission was also given the task of evaluating methods of improving the life safety features of existing highrise and public assembly occupancies within the state. In order to accomplish this task the Commission reviewed 35 major fires in highrise buildings which had occurred around the world between 1962 and 1975. Common deficiencies were highlighted in the fires surveyed, which had occurred in buildings ranging from a 6-story hotel to a 52-story office building. The survey revealed fires were occurring in these highrise structures despite fire-resistive construction. In most cases, the facilities had non-existent or only partial automatic fire sprinkler systems such as that in place at the time of the MGM Grand Hotel fire.

During the Commission's activities, yet another highrise hotel fire occurred at the Las Vegas Hilton on February 10, 1981. This arson fire resulted in the deaths of eight persons. Again, the hotel had been constructed using modern fire-resistive materials as specified in the adopted model building codes, but had no automatic fire sprinkler system. It became apparent that fire-resistive construction cannot stand alone against the ravages of fire, and that partial automatic fire sprinkler systems are not adequate to handle fires occurring in highrise structures, especially with the fuel load that will be present.

The 1981 Nevada Legislature, after considering the facts and recommendations presented by the Governor's Commission on Fire Safety Codes, enacted Senate Bill 214. The bill which required installation of certain fire safety devices, became known in Nevada as the "fire retrofit law."

The bill outlined mandatory requirements with retroactive application which specified, among other requirements, that owners or operators of hotels and motels where human occupancy on floors which are more than 55 feet above the lowest level of ground accessible to vehicles of a fire department shall equip each exit corridor of the building with fire sprinklers as required by regulations of the state fire marshal, and equip each room with at least one fire sprinkler above each door opening into an exit corridor of the building. Installation of smoke detectors was mandated for hotels and motels in rooms used primarily for sleeping in those facilities with six guest rooms or more.

The bill provided for the survey of buildings within the state and owners of those buildings to submit plans of correction implementing the requirements of the fire retrofit law.

Practicality of application of the stringent requirements mandated that a forum be developed to provide for the granting of time extensions and variances that would allow for use of alternative methods that met with the intent of the law. In addition to creation of the State Board of Fire Safety to deal with those issues, the Legislature also made provisions for the issuance of industrial bonds to assist businessmen in meeting the new requirements. However, the Nevada State Commerce Department received no applications for funding assistance.

During the survey period, approximately 33,000 buildings were inspected. An estimated \$550 million in fire retrofit work was completed between 1981 and 1985. Only 20 buildings were closed that have not since reopened, and no appeal or court challenge was filed as a result of the "fire retrofit law."

The Nevada fire retrofit law is working. Nevada has not suffered a life loss from fire in a hotel or motel, 3 or more stories, that is sprinklered and equipped with smoke detectors since the law was enacted. We did experience the deaths of four persons in an unsprinklered 2 story motel due to an act of arson, which points out the need for automatic fire sprinkler systems and smoke detectors. This motel was being remodeled to meet retrofit standards when the fire was set.

Numerous incidents and statistics could be cited to point out the fact that automatic fire sprinkler systems save lives. A published report of the National Fire Protection Association noted that in a single four-story wood-frame hotel containing 67 rooms, each equipped with a smoke detector, lives were saved by the automatic fire sprinkler system. At 3:45 a.m., the hotel's audible fire alarm sounded alerting guests and hotel staff. Arriving firefighters found that a single sprinkler had extinguished the blaze after first confining it to a bed in a second-floor guest room. The bed's occupant was removed from the room unconscious and taken to a nearby hospital, where he was held for treatment of severe smoke inhalation.

Fire officials blame the \$3,700 fire on the heavily intoxicated victim, who had apparently fallen asleep on the bed with a lighted cigarette in his hand, and the cigarette ignited the bedding material.

About 20 other overnight guests were evacuated for a short time. All were saved because of the presence of these life-saving fire protection devices.

H.R. 94 is a good law, and passage will take a giant step towards the reduction of loss of life by fire in highrise hotel and motel facilities across the nation.

Nevada's experience stands as an example to our nation of how the loss of lives and property by fire can be reduced by positive government action in concert with the business community.

Senator BRYAN. Thank you very much.

Mr. Lehn, we will hear next from you.

STATEMENT OF KENNETH LEHN, NORTHEAST REGIONAL MANAGER, NATIONAL FIRE SPRINKLER ASSOCIATION, ABERDEEN, NEW JERSEY

Mr. LEHN. Mr. Chairman, my name is Ken Lehn. I am regional manager, National Fire Sprinkler Association. I appreciate your invitation to be here this morning. The National Fire Sprinkler Association is a trade association representing installing contractors, manufacturers and suppliers of various necessary services.

I have submitted written testimony, and I will stand on that testimony, Mr. Chairman. I would like to supplement that testimony with some remarks that I would like to make.

Senator BRYAN. We will make your written statement a part of the record, Mr. Lehn, and hear any additional comments you would like to make.

Mr. LEHN. Thank you, Mr. Chairman.

I would like to respectfully respond to the comments by Senator McCain on compartmentation. First of all, we have no quarrel, if that is the word, with putting all sorts of safety features into buildings such as smoke detectors and fire retardant materials, et cetera. We have a problem when those steps are taken as an equal step to sprinkling the building or doing those things instead of sprinkling the building. Then we have a real question.

Let me refer you to the Boca Building Code. I have been going to Boca hearings for ten years where the various code changes are debated just as issues are debated in the Senate. Several years ago code change was made on highrise buildings, and I testified. The question was whether the highrise buildings would be sprinklered or be compartmented. I stated to the people present that building highrise buildings with compartmentation, putting in a lot of cement without sprinklers is nothing more than building ovens in the sky.

The Boca Code, which is a consensus document, over the years has opted towards active fire protection such as sprinklers and has moved away from compartmentation. That has been done through consensus and the decisions of many, many experts from many, many states.

Let me also refer to New York City. By the way, I served 23 years in the New York City Fire Department as a firefighter and a fire officer. I served many years in Manhattan where you have highrise buildings and you have subcellars five stories below. Long before I ever expected to be here or representing the sprinkler industry, I knew that sprinklers work, and that was long before I ever thought I would be sitting here. So I can say here that I know personally, not depending on statistics, that sprinklers work and are the answer to the fire problem.

Now let me also refer to New York City where in 1973 Local Law 5 was passed. Local Law 5 was addressed to highrise business buildings designated E in the New York City Building Code. That gave building owners a choice to either put in sprinklers or to compartment the building in units of 7,500 square feet. If they put in smoke detectors they could compartment the buildings to 15,000 square feet.

Well, of course, it went through the courts for about six years. Finally it became law and people had to comply with it. Most people, businesspeople, decided to follow the route of sprinklers. Let me give you one example that I personally was involved with.

The Exxon Corporation was headquartered in New York City until very recently. There is a 52-story office building across the way from Rockefeller Center. That building is co-owned by Exxon and Rockefeller Center Foundation. It is also occupied by Time-Life. The boards of directors of these two organizations realized it had to comply with Local Law 5. They assigned an engineer to the project. The engineer called me. I spent two hours with him educating him on sprinklers. The decision by those two boards of directors was to sprinkler that building, and that 52-story office building today is sprinklered.

The issue between compartmentation versus sprinklers has been, I think, settled. I would suggest that you check with the Boca Code and the staff. That has been settled in favor of active protection if we are pitting active versus passive.

I will say, if you have sprinklers in the building and you also add some other aspects, fine. The Boca Code which was mentioned before has tradeoffs. If you sprinkler a building, you can reduce the fire rating of walls from, say, four to three hours to two hours. That is done by consensus, so I just want to conclude on that point.

Now on pricing of sprinklers, we made a study and the gentleman in the audience, our associate director of engineering, Ken Isman, directed a study in the Chicago area of retrofitting of buildings. We concluded the average cost to be about \$1.46 per square foot. In Chicago, the Palmer House, a well-known hotel, was retrofitted four years ago. It was a very difficult building to retrofit because of its construction and layout. That building four years ago cost \$1.70 to retrofit.

Senator BRYAN. Per square foot?

Mr. LEHN. Beg pardon?

Senator BRYAN. Per square foot?

Mr. LEHN. Per square foot. Good point. I am glad you are listening.

Let me go back to 1980, the year of the MGM fire; in fact, I think a couple of weeks before or after. The Stouffer's Inn in Harrison, NY caught on fire. 26 people, 26 executives were killed. It almost wiped out one company. I have been to the Stouffer's Inn, and, as Congressman Walgren stated, the Stouffer's Inn is one of the plushes, most beautiful places you ever want to see. The landscaping is absolutely lush, and I guess it is expensive. Back in 1980, I think, when those executives went there, they figured they had all the security in the world. Firewise they did not because the building was not sprinklered.

S&S Sprinkler Company of West Nyack, NY in 1981 sprinklered the Stouffer's Inn at a cost of \$1.20 per square foot. Allowing for inflation, maybe it would be \$1.40 today, but I believe when we hear outlandish prices on sprinklers, I am telling you the realistic figures.

Senator BRYAN. Mr. Lehn, if I could interrupt you, what type of construction did Stouffer's have at the time of their fire loss? Do you recall what the structure was?

Mr. LEHN. No, I cannot recall. In a technical sense, I do not know the classification offhand. I cannot give you an exact determination.

Mr. HILTON. Senator Bryan, I can answer that question if you would like to know the answer.

Senator BRYAN. Mr. Hilton, why not wait until we get to your testimony so we do not further interrupt Mr. Lehn further. If you will comment on that when you testify, I will appreciate it.

Mr. LEHN. In closing, Mr. Chairman, I would like to say that what we are considering today is really a result of what the Congress and the President of the United States did back in 1974 when legislation was passed creating the U.S. Fire Administration and charging it with reducing the fire death rate in this country. The U.S. Fire Administration applied itself to smoke detectors and brought down the death rate from 9,500 per year down to around 5,000 or 6,000, and now we are struggling at 5,000 or 6,000 per year.

One of the things that the U.S. Fire Administration found out is that people were dying in residential structures. Historically, we dealt with commercial and industrial buildings with some residential with a standard sprinkler that was certainly adequate for what it was doing but somewhat slow in responding to the type of fire that we have in residential structures. This has come about largely through the effort of the U.S. Fire Administration, created by Congress.

I heard in a hearing prior to on Amtrak about private industry and government working together. This is what has happened at the sprinkler industry. The U.S. Fire Administration charged us with coming up with new technology to address and attack the residential problem. We needed a quicker acting sprinkler. Two manufacturers devoted a lot of time and effort and money to do that. We have that kind of sprinkler today.

So we are asking the Congress and the President of the United States today to follow up on that commitment made back in 1974. We have the technology today, and we are asking you to put it to use in hotels through H.R. 94.

I say this with all due respect. You also have a responsibility when you send out Federal employees around the country doing business for the Federal Government to protect them with the latest and the best technology we have. On that basis, sir, we hope that H.R. 94 is passed, and I would like to answer any questions you have.

Also, Ken Isman is in the audience, who could help, too.

[The statement follows:]

Hearing Statement of Ken Lehn
Regional Manager, National Fire Sprinkler Association

Before the Senate Consumer Subcommittee
On The Hotel and Motel Fire Safety Act of 1989 (H.R. 94)
April 19, 1990

Thank you Mr. Chairman. My name is Ken Lehn and I serve as Regional Manager for the Northeast Division of the National Fire Sprinkler Association. Established in 1914, the National Fire Sprinkler Association, Inc. is a trade association comprised of installers, manufacturers and suppliers of fire sprinklers and related equipment and services. I appreciate having the opportunity to provide testimony before the Subcommittee on this important legislation.

I am here today to express the views of our association on The Hotel and Motel Fire Safety Act of 1989 and to answer any questions Members of the Committee may have regarding sprinkler technology. It is our opinion that the measure which was passed in the House on November 17, 1989, H.R. 94, is a sound and practical approach which focuses on greater fire protection for the traveling federal employee and the public in general. In essence, we believe that the provisions requiring both sprinkler systems and smoke detectors in designated lodging facilities are critical policies which will insure greater opportunity for life safety in fires. Furthermore, we believe that the bill provides for a reasonable time frame which is both beneficial to the federal government and to hotel and motel owners.

While we acknowledge that early warning alarms and detection systems work well to increase life safety for occupants, we believe that the sprinkler system is able to do more. Sprinklers have the ability to automatically suppress a fire before it gets out of control. They have proven to be effective in protecting lives from fires.

It is important to note that our association conducted a survey of retrofit jobs in various hotels and motels located in the Chicago area last year and found that the sprinkler retrofit cost was estimated to be on the average \$1.46 per square foot. I understand that others have estimated the cost for sprinkler retrofit jobs to be about \$3.00 per square foot. Our survey focused on the Chicago area because we felt that market would provide a good basis for comparison to many other markets. We believe that \$3.00 per square foot is on the high end, but is still comparable to the cost of carpeting.

Another cost concern is that retrofit activity disrupts business in a lodging facility. Depending on the project requirements, little or no disruption occurs during a retrofit activity. Finally, the installation of a sprinkler system provides incentives for savings in insurance rates. While costs may not be recovered in the first year, the long term benefits are numerous and contribute to a healthier financial position for the business.

Another important aspect of the cost benefit analysis is potential liability expense. I can refer directly to the exorbitant costs associated with the Dupont Plaza Hotel fire which exceeded \$200 million. A large portion of this cost consisted of claim settlements for the families of the 97 people who perished in this fire. The liability cost is always a factor in a deadly fire and can be prevented if facilities are equipped with adequate fire protection systems and lives are saved.

The NFSA firmly believes that the installation of fire sprinkler systems will provide long term economic benefits to hotel and motel owners. There will always be concerns about costs, but I believe more emphasis should be given to the benefits these systems provide.

I understand Mr. Chairman, that while you served as Governor of Nevada you were involved with the implementation of the state's fire retrofit law. The Nevada statute is a far reaching initiative aimed at protecting lives from fires. It resulted from careful evaluation and assessment of past fires which led to numerous lives lost in Nevada. I am aware that the law was designed to reach all public and private buildings to provide adequate fire protection. I understand that since the bill was enacted in 1981, Nevada's high-rise buildings have been retrofitted and that the success of this effort was a result of a commitment from the state and local governments and the business community. Mr. Chairman, you are to be commended for your leadership on this issue. The State of Nevada serves as a great role model as an innovator in fire protection codes.

It is difficult to explain why the U.S. continues to be plagued with a serious fire record. Thanks to so many dedicated professionals and volunteers, new technologies like the quick response sprinkler have been developed. We must insure that this technology is utilized and incorporated into our fire protection codes.

We support the provisions of H.R. 94 and believe it will serve as an important first step in insuring that adequate fire protection systems are in place for the traveling public.

Senator BRYAN. Chief, nice to have you here with us this morning.

**STATEMENT OF DAVID HILTON, 1ST VICE PRESIDENT,
INTERNATIONAL ASSOCIATION OF FIRE CHIEFS**

Mr. HILTON. Thank you, sir. And I appreciate the opportunity to come and testify on behalf of the International Association of Fire Chiefs.

My name is David Hilton. I am the Fire Chief of Cobb County, GA; it is a community immediately west of and adjacent to the City of Atlanta. There are some 460,000 citizens in our county. However, I am here to testify, first, as the 1st Vice President of the IFC, and then as a local fire chief who has local problems, and with local solutions to some of those problems.

I would want to talk as a fire chief today, if that will be acceptable to you.

First, I would like to preface my remarks by commending you, Senator Bryan, and other members of the distinguished subcommittee, for holding this hearing. Obviously, I would like to commend Congressman Weldon, Congressman Boehlert, and Congressman Walgren for their efforts in moving H.R. 94, the Hotel and Motel Fire Safety Act of 1989, through the House of Representatives.

Even though he is not with us right now, I would like to also thank Senator McCain from Arizona, who has been meeting with several of our fire chiefs earlier this year about this subject.

You have heard testimony not only from the Congressmen from the other side, I think it is called, but also, Senator Bryan, you have made a lot of comments about the number of fires we have had and the severity of those fires and the losses in those fires. So I am not going to get into all of that. I am not going to get into the industrialized fire losses in this Nation.

I want to tell you that in the official opinion of the fire service and the fire chiefs, the grassroots fire chiefs in this country, we have got a disaster waiting to happen. We are going to wind up with a fire in this country that is going to wake us up, and it is going to kill between 4,000 and 5,000 people.

The MGM fire, incidently, according to the fire chief that we talked with out there, stated that, had it not been for a partial sprinkler system in the lobby area of that building, there would have been in excess of 4,000 people dying in that fire.

So that disaster is waiting to happen, whether it be in a hotel or motel, a multi-family dwelling, or the nightclubs that have been alluded to a little bit earlier. So we are waiting on that.

Most recently we had a fire in Atlanta, which is adjacent to us as I said, on Peachtree and 25th. There was one federal employee, by the way, killed in that fire. It was a building that had been leased by the Federal Government for some federal functions. Only six people died in that fire. It was a one-room fire. It was on the sixth floor of probably about a eight- or nine-story building.

The building was non-sprinkled. Had it been sprinkled, all the experts from the fire side even to the industry side said only one person probably would have died in that fire at the most.

Most recently, in the last four weeks, we have had a fire in a 13-story high-rise for the elderly, a non-sprinkled building. The fire was on the 11th floor. The fire blew out the windows on the 11th floor, and the glass blew out and fell on top of Fire Station Number 15 in the City of Atlanta. Two people died in that fire.

Somebody made a statement a little bit earlier—our problem in the fire service is not the time it takes us to get from point A, the fire station, to the fire scene. Our problem is the time element from the incipient stage of the fire until we get the call to go to that fire.

As somebody stated earlier, fire sprinklers are a proactive system rather than a reactive system or a passive system. In our county of 460,000, we took it upon ourselves a number of years ago to begin to be proactive. We began to develop a modified NFPA-13 system for multi-family dwellings. Presently, we have got over 60,000 units sprinkled in our county. We have had 89 activations in those buildings, and most recently, two in the last two weeks. We have had no fire deaths, two minor injuries. The maximum fire damage in any of those activations in those multi-family dwellings, up to four-stories in height, we have had a maximum fire loss of \$500 in any of those fires.

And there is an adage that I use an awful lot, put the wet stuff on the red stuff, it will turn to gray stuff, if you do that in a timely fashion. And that is exactly what we are talking about in the hotel/motel industry.

I applaud the Congress on trying to protect the citizens of our Nation who work for the Federal Government. But, by doing that, we are also protecting the traveling public, which are you and I and those that are not necessarily working on the federal level.

The answer to the fire problem is fire sprinklers. That is one major answer. And as I think Congressman Walgren said, it is not the only answer, but it is a major answer. We are all convinced of that. I do not think there is any question about that.

We have three major fire problems in my community. And my community is not any different than any county or city in this Nation. And those three major fire problems have been easily identified: men, women and kids. That is what causes fires in the vast majority of the fires that we have in this country, whether it be hotels, motels or whatever. It does not make any difference.

When we address in a proactive way how to control those fires caused by those problems, then we have the answers to the fire problem in this country. We are working, as I said, in multi-family. Multi-family is nothing but a hotel or a motel, with two and three stories.

I had a flight out of Atlanta at 5:45 yesterday morning. At 3:00 I got a call at my residence. We had a fire in my county yesterday morning where there were only four injuries, and luckily no deaths. It was a three-story unsprinkled apartment house built by code, explicitly by code on compartmentalization, prior to our sprinkler ordinance which went into place about nine years ago.

Four people jumped from the third floor.

That fire could have killed in my county a large number of people in that multi-family dwelling. I think there was 26 units in this building. We were extremely lucky.

Somebody asked the question or you asked the question about the Stouffer's Inn. Dan Berry, the Fire Marshal of that area of New York had called on us a number of years ago to help them try to put a retrofit law in place in the State of New York, and to put a sprinkler ordinance in place in this county in New York, White Plains.

Ironically, we had a meeting in the Stouffer's Inn in the same room that the 26 executives were meeting in when the fire occurred in that Stouffer's Inn. It has been sprinkled since the fire. But, ironically, the meeting we held to put together that program for that community was in that room. A lot of irony was involved.

The building was completely compartmentalized. It was built by code, according to Dan Berry. It had everything in place according to the BOCA codes when the building was built. I will go back to three major fire problems. What happened in that fire, if you recall, it was an arson fire. A disgruntled employee set some boxes and material in a hallway on fire using gasoline, and those people burned to death trying to outrun a fire in a corridor in a hallway in a non-sprinkled building.

Somebody mentioned a little bit earlier about the fire in the Dupont Plaza, the fire in MGM, the fire outran the people. That happened in the Beverly Hills Supper Club fire. History means something to us. But if we take history and we do not do anything about history, it is bound to repeat itself. And it has been doing this from time immemorial. And it is going to continue to do that.

I encourage you and thank you for your interest in H.R. 94. We, from the Fire Chiefs Association and from the fire service as a whole, and as Congressman Weldon said earlier today, there were some 2,000 of us in a room last night, there are some two million of us throughout this country, we are on your side. We want to do everything within our power to help you and your delegation and your committee to understand what the fire problems really are in this country.

And I commit to you that the International Association of Fire Chiefs, our organizations, are prepared to answer any questions you may have and to do our best to teach you everything that you need to know about the fire problem in this country.

I want to express my appreciation once again for allowing me to come and testify on behalf of the IFC. And if you have any questions, I would be glad to answer them.

And I have got one other comment. Tim Butters from our organization gave me a note. As a result of the fires in Virginia involving nursing homes, Governor Doug Wilder signed Senate Bill 1 a few weeks ago which would require sprinklers in nursing homes in the State of Virginia. Reactive. Reactive in nature.

And human beings are that way. When two people get killed at an intersection in Cobb County Georgia, we get a stop sign. Five gets us a traffic light. And I am not being critical. I am just saying that is what has happened in this country.

Thank you very much.

Senator BRYAN. Chief, thank you very much. I think it is implicit in your testimony, but let me just, for the record, make sure that our record is complete. If I understand the thrust of what you are saying, you are saying that a building that is designed with the

latest and the most sophisticated of code adherents, but not sprinkled, can nevertheless be a deathtrap under certain circumstances?

Mr. HILTON. Absolutely, no question.

Let me use a scenario very briefly. This room is a very nice room, and I do not know how long this building has been built, but I would assume a few hundred years. This building is compartmentalized. It was compartmentalized probably when it was built. But let us take a new construction.

The problem with compartmentalization is this, and somebody mentioned this, it is a high-rise crematorium. What happens in this compartmentalization is we are supposed to keep fire from area A to area B for one hour or two hours, or whatever the case may be.

But what happens in the real world out there is that we come in and we begin to punch holes in that wall. We will put in light switches and receptacles and telephone systems and heat plenums and vents, and all of a sudden we do not have a compartmentalized building anymore.

And the fire that occurred at the MGM, if you recall, occurred on the first floor, the lobby area, and all the people died on the 26th floor. The same thing with the Dupont Plaza. Those people did not die from fire. A lot of those people were not burnt, they died from smoke inhalation, poisonous gases. And all got through those areas that were supposed to have been separated from area B to area A.

You cannot stop that. There is no way that that can be done. And I have been in this business 36 years, and I can tell you from experience it cannot be done.

Senator BRYAN. Chief, your comment provokes another question on my part. It has been my understanding, and you have made reference to it, that most of the fire deaths are caused not by people that have been incinerated by the flames themselves, but by the toxic chemicals or smoke that is a byproduct of the fire itself.

And for my specific question, could you please tell us for the record how sprinklers address the problem of lethal smoke ingestion?

Mr. HILTON. I would be very glad to. Number one, water washes. We ran a series of tests in my county. NFPA has run a series of tests. Factory Mutual, a research foundation has run a series of tests. And in those tests we are reading through a computer system the lethal doses of carbon monoxide, hydrogen cyanide and hydrogen chloride, and those are the killers in the fire.

When that fire, in the incipient stage, small, when it begins to burn, it begins to emit some of those chemicals. If the water can be applied to that fire quickly enough, the water itself, the fine water spray actually washed the environment of those chemicals: carbon monoxide, hydrogen cyanide and hydrogen chloride.

The fire is not allowed to gain enough momentum before that sprinkler—and we are talking about fast-response sprinkler heads, the new technology that he is talking about—washes the environment, it extinguishes the fire. So that cures the problem. Okay?

Senator BRYAN. Chief, I appreciate it.

Rex, a question to you if I may. How many states, following Nevada's example in 1981, that you were telling us about, have adopt-

ed codes that are comparable in terms of scope and with the retroactive provisions that that legislation contained, do you know?

Mr. JORDAN. No, sir, I do not, Senator. I have had calls from two state fire marshals within the last 60 days, that their state governments were very concerned that what retrofit laws they had, they had enough pressure politically to cancel. And they were concerned. In fact they wanted copies of our commission reports and statute. And one of those states just lost nearly a dozen people in a 10-story hotel.

Senator BRYAN. In terms of the operative effect of this legislation, in terms of a state whose codes do not now require the level of stringency that this piece of legislation does if it were enacted, and if all of the hotels and motels in the state chose to comply. And how many states might be affected by retroactive provisions that this would impose upon them? I want to emphasize again as I am sure all three of you know, this legislation does not mandate anyone to do anything in terms of the private sector, it certainly encourages it by the travel arrangements made by federal agencies,

Mr. LEHN. Well, I think this legislation would have a very positive effect throughout the country. And it specifies hotels that we are talking about, and it certainly encourages and requires federal employees to stay in those hotels that are sprinkled. So if some hotels choose not to be sprinkled, that is a business decision, and they are going to be losing government business.

But I think, also, in a larger sense, with the passage of this legislation, the Federal Government is sending out a message loud and clear on fire protection and the placement of sprinklers. And sprinklers, there is no question, are the first line of defense against fire.

It was stated earlier that other systems, passive systems frequently require the reaction of people and the intelligent action of people. Once a sprinkler system is in place, and it takes some intelligent action to get it in place, but once it is in place, that system is stupid, it only reacts to heat. And it does it automatically, it does it seven days a week, 24 hours a day. And it does not depend on anyone.

Now there are certain things you have to watch out for. Do not close control valves and things like that. That can be protected against. But the system itself does not depend on people. The watchman can be asleep but the sprinkler system will go off. And it will save lives. In 110 years there has never been a multiple loss of life due to fire in a fully sprinkled building. And there is the record right there.

Senator BRYAN. We thank you very much for your testimony.

Our final panel this morning will consist of Mr. Richard T. Ashman. Mr. Ashman serves as Senior Vice President of the Holiday Corporation. And joining him on this panel will be Mr. William Bowen, who is General Counsel of Super 8 Motels Incorporation, out of Aberdeen, South Dakota.

Gentlemen, welcome to the subcommittee hearing, and we would be pleased to hear testimony from you now.

I will give you a chance there, Mr. Ashman, to collect your notes there, and when you are ready—just take your time, we are not in a big hurry. We welcome your comment.

**STATEMENT OF RICHARD T. ASHMAN, SENIOR VICE PRESIDENT,
HOLIDAY CORP., ACCOMPANIED BY RALPH DECKELBAUM,
FRANCHISEE, HOLIDAY CORP.**

Mr. ASHMAN. Thank you, Mr. Chairman.

My name is Richard Ashman, and I am Senior Vice President and member of the board of directors of Holiday Inns, Inc. I am also accompanied on my right by Ralph Deckelbaum, who is one of our franchisees.

And as well as being a franchisee, he is also a former president of our international association of all of our Holiday Inns. He is with me today to answer any questions at the owner level that possibly are more appropriate for him to respond to.

Senator BRYAN. We are pleased to have you with us, Mr. Deckelbaum, as well.

Mr. DECKELBAUM. Thank you.

Mr. ASHMAN. The first Holiday Inn was built in Memphis, TN in 1952. And over these past 37 years we have developed over 2,480 Holiday Inns, comprising over 423,500 rooms in all 50 states, and in over 50 countries around the world.

Holiday Inns, for years, has assumed a position of leadership with regard to the safety and the well-being of its guests. From the very early stages of development Holiday Inn hotels have been required to be of all masonry construction, no wood framing. A first in the hotel industry.

Over the years we have added requirements for fire-retardant fabrics, floor coverings, mattress coverings, drapes, wall coverings, fire-rated walls and doors. And recently, after exhaustive research and study, have completed implementing our newest requirement that all Holiday Inns have hard-wired automatic smoke detector alarm systems in all corridors and commercial space, backed up by an automatic emergency power supply system, and connected to a central annunciator and locator panel at the front desk.

Holiday Inns has a superb record in fire safety. And even with being the largest hotel chain with the most rooms, we have had no fire fatalities in more than a decade, a period involving more than 890 million guest nights.

The sponsors of this bill claim that over the five-year period through 1987, on the average some 80 deaths occurred annually in hotel fires. The most recent figures prepared by the National Fire Protection Association indicated that for the five-year period ending through 1988, on the average, some 70 deaths occurred . . . and in 1988 there were only 45 hotel fire deaths.

In 1988 there were only 45 hotel fire deaths.

H.R. 94 addresses the 45 and completely ignores the 5,955 of the 6,000 annual fire deaths alluded to earlier.

When you consider that over 935 million people sleep in hotels in the course of one year, this translate in 1988 to one death out of every 21 million hotel guests. The National Fire Protection Association has stated that "these figures continue to show a declining trend in losses for the lodging industry indicative of our progress in improving fire safety in hotels."

I am inclined to think that this is a record that should be applauded and its trend applauded, rather than attacked. Fire protec-

tion and safety in a hotel is a very complex and complicated issue. Therefore, it does not lend itself to any one simple fix or solution, such as merely requiring smoke detectors and sprinklers in every guest room.

Contributing as significantly to a guest's safety are the materials used to construct and furnish a hotel. Holiday Inns has for years recognized the needs for fire preventive measures in its hotels. It has been our objective, starting with the initial construction, through furnishing and equipping, to provide an environment that significantly reduces the opportunity for ignition to occur in the first place, rather than to rely solely on a system to indicate and quench a fire once begun.

We believe that a hotel guest's safety is better served by taking steps to marry fire prevention with smoke detection, as opposed to smoke detection with extinguishment of a fire once ignited, and totally ignoring the materials used to construct and furnish the hotel.

Over 90 percent of our 1,400 Holiday Inns in the United States are franchised, and therefore owned and operated by independent business people; 586 of these hotels would be required to install sprinklers in their guest rooms under the bill passed by the House or be blacklisted by GSA.

We believe it is discriminatory and excessive to require a hotel that has already, in its initial construction and furnishing, made a significant incremental investment in the area of fire prevention to make yet an additional extensive investment to install a sprinkler system.

Our analysis of 1,569 actual Holiday Inn rooms that have been retrofitted with in-room sprinklers reveals that the cost ranged as high as \$2,100 per room. The average cost for those rooms would have equated to some \$280,000 for a 200-room hotel.

This additional investment is unwarranted, we feel, in trying to make a facility with an exemplary track record of fire safety yet even safer. The issue as we see it is "how safe is safe" and what is the cost benefit versus the risk?

Where is the cost benefit to the public and to the government? In our opinion, and in the opinion of our experts in our company, a wood frame building should be sprinklered. However, it is blatantly unfair and discriminatory to apply the same requirement to someone who has gone to the extra expense of building a non-combustible structure, furnished it with fire-retardant materials, as well as having installed a hard-wired smoke detector alarm system with emergency backup power.

We feel that sprinklers do save buildings, and smoke detectors address life safety.

States, municipalities and the hotel industry have and are continuing to address this all-important issue in a very adequate and responsible manner, which is certainly borne out by the statistics, and more importantly by their trends.

This proposed legislation promotes and encourages only the installation of smoke detectors and sprinkler systems as the sole protection of a guest in a hotel. Thus, it provides no encouragement for hotels to address the fire prevention aspect of fire safety.

This totally ignores the advancements in technology that are being made to prevent ignition in the first place, and actually encourages hotels to downgrade the fire retardant standards in their construction, their in-room furnishings and their building materials.

Federal intervention, as proposed, we believe is not called for. And even if it were, this legislation is certainly not the appropriate or adequate vehicle.

Thank you, Mr. Chairman.

[The statement and attachments referred to follow:]

STATEMENT OF RALPH H. DECKELBAUM, PRESIDENT, MARDECK LIMITED

Mr. Chairman, members of the Committee, my name is Ralph H. Deckelbaum. I am the President of MarDeck Ltd., a firm which operates 13 hospitality and lodging facilities including 10 Holiday Inns as a franchisee of Holiday Inns, Inc. Among these properties are the Holiday Inn Crowne Plaza in Rockville, Maryland, the Holiday Inns in Old Towne, Alexandria and Bethesda, Maryland, the Holiday Inn at the Hampton Coliseum, Hampton, Virginia, and the Holiday Inn Durham West, Durham, North Carolina.

I am pleased to appear before the committee today together with Mr. Richard Ashman of Holiday Inns, Inc. My statement will be very brief . . . but it is important that you understand the needs of the individual hotel owner/operator as you review the thrust and provisions of HR94, the so-called Hotel and Motel Fire Safety Act.

Mr. Chairman, I believe I can help you understand precisely what makes up the Holiday Inn System . . . the largest and most comprehensive lodging system in the world. Of the more than 1400 hotels and motels nation wide, fully 90% are owned by individual franchiseholders like me and my partners. Some own one property, some operate several. In all there are more than 2000 franchisees in the Holiday Inn family . . . all representative of the classic entrepreneurial spirit of our country. As a past President of the International Association of Holiday Inns, the organization of franchiseholders, I represent all of my fellow owner/operators before you today.

Mr. Chairman, HR94 as presently drafted will do serious damage to the Holiday Inn System as I know it . . . and won't, I fear, do much to accomplish what its proponents seek.

Holiday Inns currently serve 17% of the Government employee market . . . more than 3 times our nearest competitor. The reasons for this are a matter of record; the largest system, with the greatest number of locations, attractive pricing and consistency of product. If you were one of our competitors . . . with fewer locations and perhaps higher costs or prices . . . what would you do to make life difficult for us? Well, I'd take something where I had already invested capital dollars in *all* my facilities . . . and see if I couldn't force my major competitor to have to spend money to do the same thing, knowing they can't recover these new costs in any way but through increased prices . . . or risk forfeiting certain business.

Now Mr. Chairman, one might think from those views that I am callous about fire safety. Far from it. We have an exemplary record in this area. In the 34 years I have been in the hotel business, we have never had a death or an injury in a fire.

Why? Because of our up-front investment in non-combustible construction materials and in a non-igniting room environment. Sure, we've had our careless smokers . . . and our short-circuited appliances . . . and our kitchen grease flare-ups. But good employee training and aggressive techniques coupled with our hard-wired smoke detector system and our ignited-resistant environment has given us the record I have referred to above.

However, Mr. Chairman, HR94 could change all that. In 9 of our facilities and 586 similar properties of my fellow franchiseholders across the country, we are being told "Retrofit with sprinklers or forfeit government business." I believe that is anti-competitive . . . as well as being unnecessary . . . and it certainly wouldn't have done anything to protect those poor souls at the Fontana Hotel in Florida!

Mr. Chairman, take a hard look at the fairness of the bill before you. Responsible people who make the kind of investment we have in major lodging facilities take great care with the safety of our guests. Our record proves it. Don't penalize us for having done the right thing.

Thank you very much and I'll be pleased to respond to your questions.

ATTACHMENT #1

INSURANCE RESOURCE

G R O U P

December 8, 1989

Mr. Richard T. Ashman
Vice-President, Gov't. Affairs
Holiday Corporation
1023 Cherry Road
Memphis, TN 38117

RE: Review of Estimated Insurance Premium Savings
Sprinklered Hotels vs. Non-Sprinklered Hotels

Dear Mr. Ashman:

Recently, you requested that the agency prepare for you the exhibit referenced above. The completed exhibit is enclosed and we hope you will find it informative.

For a better understanding of this data, some explanations:

- o only the primary property & liability package premiums were used. Umbrella liability was not analyzed.
- o "Current Pkg. Premium Non-Sprink" represents the premium level at which these accounts are now written.
- "Pkg. Premium if Fully Sprinklered" represents the consensus opinion from five (5) industry sources. This figure could fluctuate + or - 10%.

Should you have any questions concerning this material, please give me a call.

Very truly yours,

INSURANCE RESOURCE GROUP



Bruce L. Barton, C.P.C.U.
Director

BLB

enclosure

3728 Lamar Avenue • Memphis, TN 38195 • (901) 362-4222
1-800-537-4079 FAX: (901) 369-7540

A Subsidiary of Holiday Corporation

PREMIUM COMPARISONS
NON-SPRINKLERED VS. SPRINKLERED

LOCATION	BUILDING VALUES	GROSS RECEIPTS	# OF ROOMS	# OF STORIES	CURRENT FAC. PREMIUM NON-SPRINK.	FAC. PREMIUM IF FULLY SPRINKLERED	PREMIUM DIFF.
WASHINGTON, DC (THOM.CR)	13,323,000	4,585,000	208	14	63,748	47,811	15,937
E. LANSING, MI	4,864,000	1,500,000	113	3	54,889	38,422	16,467
GRAND FORKS, ND	4,768,000	2,291,000	151	2	44,296	30,564	13,732
ANN ARBOR, MI	11,200,000	3,775,000	228	4	105,186	75,734	29,452
SALISBURY, NC	4,500,000	3,680,000	124	2	32,000	20,800	11,200
CHARLESTON, SC	11,984,000	6,027,000	214	7	50,744	35,521	15,223
RICHFIELD, OH	7,800,000	4,500,000	219	4	94,554	64,297	30,257
WISCONSIN DELLS, WI	5,340,000	3,420,000	233	2	44,317	30,579	13,738
COLUMBUS, GA	3,000,000	1,810,000	171	2	26,047	19,535	6,512
WARREN, PA	3,155,000	2,500,000	110	4	29,000	20,880	8,120
NASHVILLE-VANDERBILT, TN	8,830,000	5,366,000	300	13	51,671	32,552	19,119
CLEMSON, SC	4,147,703	2,638,000	220	2	14,048	10,536	3,512
AMSTERDAM, NY	3,000,000	850,000	126	5	31,609	22,758	8,851
PROVINCETOWN, MA	2,344,200	1,600,000	139	2	28,239	20,614	7,625
WAYNE, NJ	2,900,000	3,121,000	139	2	55,449	37,705	17,744
ROCKVILLE CENTER, NY	5,000,000	3,075,000	100	5	39,391	27,574	11,817
NEW ORLEANS, LA(CHAT-LEM)	5,622,000	4,193,000	171	5	87,523	56,015	31,508
RICHMOND, KY	2,600,000	1,665,000	141	2	29,600	20,128	9,472

NOTES:

SINCE THESE BUILDINGS ARE IN FACT NOT SPRINKLERED, THE "PREMIUM IF FULLY SPRINKLERED" COLUMN EXHIBITS ESTIMATED PREMIUMS. WHILE IT IS AGREED THAT THESE REDUCTIONS IN PREMIUM ARE REALISTIC, THE ACTUAL CREDITS ALLOWED FOR SPRINKLER PROTECTION DEPENDS ON THE PARTICULAR CHARACTERISTICS OF EACH INDIVIDUAL HOTEL AND WOULD BE SUBJECT TO SUCH THINGS AS -- TYPE OF SPRINKLER SYSTEM, TYPE OF WATER SUPPLY, CONSTRUCTION OF BUILDINGS, FIRE PROTECTION CLASS, AND NUMEROUS OTHER PHYSICAL CHARACTERISTICS. ACTUAL RATES FOR SPRINKLERED BUILDINGS COULD ONLY BE PROMULGATED BY THE INSURANCE SERVICES OFFICE, THROUGH INSPECTION OF THE PREMISES AFTER THE SPRINKLER INSTALLATION IS COMPLETED.

TOTALS:	882,311	612,025	270,286
AVERAGE PERCENT SAVINGS IF SPRINKLERED:	30%		

ATTACHMENT #2

The table below represents the actual costs of installing sprinkler systems in the listed hotels which provide a broad geographic sampling of costs across the United States. The insurance savings listed were provided by our property insurance carrier, Arkwright, one of the most widely used commercial property insurers in the country

HOLIDAY INNS SPRINKLER COST VS. INSURANCE SAVINGS

<u>HOTEL</u>	<u>SPRINKLER COST</u>	<u>INSURANCE SAVINGS</u>	<u>RECOUP YEARS</u>
Holiday Inn Lee Road Orlando, Florida 5 story, 202 rooms	\$ 155,586	\$ 4,930	31 1/2
Holiday Inn Harborview San Diego, CA 16 story, 205 rooms	447,600	8,175	54 3/4
HI Boston Government Ctr. Boston, MA 15 story, 301 rooms	285,956	10,314	27 3/4
HI San Diego Embarcadero San Diego, CA Two 13 story, buildings one 5 story, 605 rooms	1,088,000	35,057	31
Holiday Inn Sea-Tac Seattle, WA 12 story, 256 rooms	215,257	9,917	21 3/4

Senator BRYAN. Thank you, Mr. Ashman. We will hear from you next, Mr. Bowen.

**STATEMENT OF WILLIAM BOWEN, ASSOCIATE GENERAL
COUNSEL, SUPER 8 MOTELS INC.**

Mr. BOWEN. Thank you, Senator Bryan.

On behalf of Super 8 Motels, Inc., which is a small corporation located in South Dakota, I would have to tell you that we are very much in favor of anything that improves, in an effective manner, the safety of guests.

I think in looking at the bill, we feel that in some respects it does not go far enough, and I think in other respects it is somewhat simplistic in assuming that in every instance and in every type of structure the sprinkler aspect of it is going to be effective.

Up until February 17 of 1990 we could have sat here and told you that there had never been a fire-related death in a Super 8 Motel, but in Hagerstown, MD, there was an explosion on the 18th of February, and as a result of that explosion there were four fatalities. Now, that building was partially sprinklered in the mechanical areas of the building, but to this day I am not aware of any of the officials that investigated that explosion who have ever concluded that any of those lives would have been saved with a sprinkler system.

Now, there is one thing that our company is doing throughout the 700 motels that comprise the chain, and that is the installation of gas detection systems, which is something that is not even mentioned in this act. A great number of the lodging facilities across the United States are facilities that have some type of a gas source as energy for firing hot water, for laundry facilities and things of that sort.

There is very little that we found, at least, in the way of uniformity in having gas detection systems, and this company (being Super 8 Motel) has had the unfortunate coincidence of having not only the Hagerstown explosion but one in Billings, MT, both occurring in a one-year period of time.

Now, there was absolutely no relation between those two. They were built by different contractors. There was no common design or architectural drawings involved. There were different appliances involved. The source of the leak was different. But be that as it may, we believe, and the fire officials that we have talked to have indicated, that probably a gas detector would have prevented those incidents from happening by giving an early enough alert of a danger that was occurring there.

Now, as I sit here, I have a selfish interest, obviously. I represent a chain of motels that are all franchised, they are all owned by independent business people, but coincidentally they all happen to be—or most of them, at least, happen to be three stories or less. The largest of them happens to be in Las Vegas, and that is a property that has approximately 300 rooms, but the bulk of them are located in small towns throughout the United States, and they consist of anywhere from 25 rooms to 62 rooms being the common type of configuration.

In all of those, we mandate that there has to be a smoke detection system in there, and that is for every motel throughout the system. Those smoke detection systems are inspected four times a year by our company to make sure that they are working properly, and obviously we encourage the owners to be continually monitoring the operation of those systems.

The point being is that we feel that with three stories or less, those motels can be effectively evacuated in just a matter of minutes, and the smoke detectors are going to sense the particles of combustion long before the combustion reaches the point of activating a sprinkler system.

So with that you are able to have a one or two or three-story structure evacuated long before any of these sprinklers are going to reach the heat point where they are going to be discharging water. So in our estimation, you are going to be sprinkling a vacant building. We are not talking about a sixth floor, a 25th floor or something of that sort, as far as evacuating people.

Now, the life safety code, NFPA-101, has been referred to by some of the people that have spoken here, and there were a few of those people who seemed to indicate that maybe it was not a credible source because there was some input from various facets of the industry, be it the hotel-motel industry or other industries.

I learned a lesson, I guess, when I heard that, because I thought that this was a credible source of information for fire safety in the United States, and in here they point out that a properly designed automatic sprinkler system provides a dual function of automatic alarms and automatic extinguishment, but it says that the preceding is not true in those cases where early detection of incipient fire, and early notification of occupants, are needed to initiate actions in behalf of life safety earlier than can be expected from heat-sensitive fire detectors. So we really feel that there is a difference.

Now, I heard Senator McCain, who made some of the introductory remarks, talking about the fact that the bill sponsors were looking out for the mom and dad businesses. Well, should either myself or you or any Federal employee be less safe in a mom and dad operation? I feel that we would all be very adequately protected with a smoke detection system, and that apparently is being overlooked by the act.

There is also some assumption here that if you have an exterior corridor building that that somehow is going to make you safer. You have a quicker means of egress.

A couple of weeks ago I was in Whitefish, MT, staying in a very nice, two-level motel. It was not a Super 8 Motel. It had exterior corridors; it had a balcony with a wood deck; it had a wood overhang. If that did not have a smoke detection system in it, or any type of a detection system, and a fire occurred there, and that fire is out in that deck area, I have no means of escape from that room. My only means of escape, through the window, through the door, are barred by that fire.

With the interior corridor motels, such as we have in our system, you have got the exits, that meet the life safety codes, down the stairs on either end of a very short hallway—because in a typical 62-unit motel as I mentioned, you are only talking about ten rooms on either side of a hallway—but secondly, if there is some type of a

blockage in that hallway, you still have a means of egress through the window.

Now, the one story, which is actually a half story into the ground, you are virtually walking right out onto the ground from that level. The second story is one where you are just a six or seven-foot drop to safety, and obviously a correspondingly higher one from the third level, if you have a three-story property.

I guess just to summarize, we really think that you do have to promote the safety of guests in lodging establishments, and we do not disagree with the positions of using construction material that is safe. We think that smoke detection is safe, and it is an early, early form of warning people and giving them the opportunity to get out.

I guess that one last thing is that five years from now, if we sprinkle everything today, and we have thousands of motels out there that are sprinkled, and there is no program of maintenance and inspection are we sure the systems will work—now, certainly in some of the large cities, in a lot of areas you do have a program of inspection and maintenance, but I will tell you that there are a lot of little towns, not just in South Dakota but throughout the United States, where those people might spend the money to put that system in to comply with this law if it were mandated, but do you know that five years from now, ten years from now, 15 years from now, that that system is still going to be operational if the need arises?

I think that again, more investigation really needs to go into this act to make sure that we have an act that is effective and not one that just lulls you into a sense of safety because you have got a building that is sprinklered.

Thank you very much.

Senator BRYAN. Mr. Bowen, we thank you very much for your testimony as well.

Mr. Ashman, a comment was made earlier in the testimony by a non-Holiday Inn hotel witness indicating that future Holiday Inns now under construction are fully sprinklered. Is that correct?

Mr. ASHMAN. Yes. We review our standards on an annual basis, and the items that I have mentioned to you that we currently require have evolved over the last ten years, and we are, on new construction, requiring sprinklers, but the issue we have here is on the retrofitting of existing hotels. The cost of including sprinklers under new construction is dramatically different than the cost of going in and retrofitting.

Senator BRYAN. I understand your point. You make that very clear in your testimony. I guess I would say that if you have reached a judgment, or conclusion, to install sprinklers in new construction, at least by implication you must believe, and your company believes, that it makes your facilities safer. I am sure you would not do that and spend that additional money simply because it is a frivolous thought or act.

Mr. ASHMAN. It is really, senator, more in response to the trend that we see at the State levels on new construction requiring sprinklers in buildings. Hotels built in Washington, DC, seven, eight or nine years ago did not require sprinklers even in high-rise hotels, so it is a trend that we saw.

We do not feel that the building from a life safety standpoint, excluding high-rise facilities, is any safer, and our track record has proven that. In the ten years of what we have in place today, with over 890 million people spending the night with us, we have had no deaths.

So it is an issue of how safe is safe? I guess if we issued someone a fire extinguisher when they checked in and sprinklers, it would be even safer, but zero is still zero, and that is the way we have viewed it. We

Senator BRYAN. Well, Mr. Ashman, I think that the—we have obviously got to make a judgment here, those of us on the Committee.

You know, when you have a man like Chief Hilton—he and I have never met before, to my knowledge. He spends 36 years in the fire service. His testimony was pretty persuasive, at least to this senator. With the greatest respect to you, Mr. Ashman, you are not, at least as far as I know, someone with professional fire-fighting experience. I do not denigrate your background or experience in any way, but I mean that is pretty persuasive to this senator.

I had occasion to be, as I shared with you all earlier, at the MGM fire the day after. Now, I had heard for years about sprinklers, understood generally what they were, but I must say, having walked through that area and seen the devastation, and to see that part of the structure that was sprinklered and that part that was not, where the line of demarkation was so clear that a person with the poorest of vision could see it—the carpeting on the side that was sprinklered that you went into the corridor, as opposed to that part that was the main casino area, was a line that was defined as clearly as the line between the green inlay on the table there and the mahogany trim.

Every fire fighter there indicated to me that had there been a fully sprinklered building, that this tragedy would have been—if not totally avoided, substantially minimized.

What is wrong with a policy that says that with respect to Federal employees only—do not mandate anybody in the private sector, do not impose any burden upon your company to do anything—that we set a standard that Federal employees who are required to travel on behalf of the Federal Government for required business be accommodated in hotel accommodations that do have these minimal standards that we are talking about admittedly may not be perfect? What is wrong with that? I mean, we do not impose that upon you, but what is wrong with that?

Mr. DECKELBAUM. Let me see if I can put that in the proper perspective.

I do not think this bill accomplishes anything and let me tell you why. Take the city of Washington this month. I guarantee you that 99 percent of the Federal employees traveling on a per diem are not in the Marriotts and Hiltons because the rate is too high. They are in the middle segment hotels, the Holiday Inns, the Ramadas, the Qualitys, the hotels that this bill addresses, because that is all they can afford under the per diem.

On the other hand, if they are staying at one of the bases around this city that has lodging facilities, they are staying in lodging facilities for nothing, and they are not sprinklered.

Senator BRYAN. I am not sure—I do not understand what you are saying to me.

Mr. DECKELBAUM. I am telling you, it is not competitive. It is not the real world.

Senator BRYAN. You are talking about military bases. Oh, I am sorry. Okay.

Mr. DECKELBAUM. There are facilities in this—owned by the government which have lodging facilities in them which have been built within the past few years that are not sprinklered.

Senator BRYAN. Well, that is probably an argument for amending that into the bill, is it not?

Mr. DECKELBAUM. It may be. I would like to see that in the bill. If the bill is going to pass, I would not like to see the exemption for Federal facilities that is presently in there because there is somebody out there in competition. We are saying look, they are staying over there in a non-sprinklered facility, yet they cannot stay with us.

And the problem is very simple. This bill will not force people to do that. This is not a retrofitting bill. This is a bill that addresses a competitive situation, a segment of the business. There may be hotels that are not—the hotel in Vegas that had the fire would not be affected by this because I do not think they get any per diem business.

Senator BRYAN. Well, I do not know. The rates out there are pretty cheap. But whether they do or not is not the main issue.

Mr. DECKELBAUM. What I am trying to say is that the bill does not solve the problem. If the problem is to sprinkle, it is a retrofit, a reasonable bill requiring everybody to retrofit, not to say in order to get government business you have to do this.

You have got areas of the country which are excluded and there are reasonable areas as to where there is no other place to stay. The bill has to make exclusions for that.

My problem is the bill is a bag of worms and really is not going to accomplish anything and when you have a few—as few deaths in hotels as compared to the number of people staying, it is infinitesimal. It is a life, I agree with you. But the examples given here about nursing homes and apartment houses and businesses and other projects are not going to be affected one bit by this bill.

A sprinkler in a room that this bill requires will not require sprinklers in the commercial area of this room of this hotel. So, you can have the fire in the commercial area, it can spread, and the sprinkler in the room will never go off because there is no fire there. The smoke that the gentleman talked about will get to that room, and that will be it.

Senator BRYAN. Okay. I appreciate your response. Let me now yield to my distinguished senior colleague, Senator Ford, who joins us.

Senator FORD. I thank you, Mr. Chairman. I apologize for being late and as is the case in all things, it is awful hard to get around to all of them.

I visited with my fire protection people yesterday, and they have got more problems than sprinklers in hotels when you talk with them about hazardous waste as it travels down the road and a computer system. They want to put a little fee on the hazardous waste

hauler so they can set up their computer system. And this sprinkler business is just part of a package. I think what you are fighting here, Mr. Ashman, is emotion, and that is difficult because I heard a fellow say one time that you cast a vote by using 75 percent emotion and 25 percent convincing yourself that the emotional vote was correct. So, that is where we find ourself here now, I think.

What are the state and local laws as it compares to what is going on here, what this piece of legislation is attempting to do? You alluded, I think, to local and state pressures, and are we duplicating or are you building based on local ordinances a state law?

Mr. ASHMAN. Well, Senator, every building out there, I assume, has been built according to the ordinance at the time it was constructed. What this is imposing is a significantly more stringent requirement than the average out there.

There are some states, as certainly the Senator from Nevada alludes here who have enacted hotel sprinkler bills but I would say on the whole this bill is far more stringent than what is currently being required by state and local building codes from our observation.

Senator FORD. Well, it is my understanding that most states are requiring that if you construct a new hotel or motel today that it will be sprinklered. I think you said that.

Mr. ASHMAN. But we are saying that is a trend. There are still a lot of states that do not require that. And remember that hotels can be built out of wood frame construction just like a home.

Senator FORD. This bothers me a little bit, Mr. Chairman, that we are saying here that—in reading your testimony about the non-flammable materials, furniture, upholstery, masonry walls and things of that nature, when you build a hotel or motel to those standards and then you are required to add others on that you are not getting any credit for what you have already done, so you build the cheapest one you can get, sprinkler it, and you can be competitive and the Federal employees can stay in your motel. Am I correct in that?

Mr. ASHMAN. Yes.

Senator FORD. We might be throwing the baby out with the bath water here. That bothers me just a little bit. And I am not trying to be on your side or anybody else's side. I am trying to make a decision here as to how I might come down on this legislation.

Mr. Chairman, I think we are going to have to give some consideration to the kind of material that is used. I noticed in here as I was glancing through this, that there is a place in Richmond, KY involved in this, one of these things here, and they saved \$9,000 a year with sprinklers under insurance premiums, and it cost them \$29,000. So, they really lose \$20,000 basically. So, that is over a long period of time to repay that.

I hope that we can find some way to give you credit for building your motels correctly and, what is it, eight—

Mr. BOWEN. Super 8.

Senator FORD. Super 8. I did not know it was confined to South Dakota, but when I started thinking about it, ours is Super 6, I think. So, they are \$2 cheaper than you are.

Mr. BOWEN. That could be. The corporation is in South Dakota, but there are 700 motels throughout 48 states, so—

Senator FORD. Probably Kentucky is one of those, and Alaska is the other.

But I am very thankful for your letting me be here. But we have got to look at the material or the construction material of the buildings themselves, I think.

Mr. Bowen, I believe and I asked the Chairman, you said that yours were three stories or less. You are excluded under this bill only if you are two stories or less.

Mr. BOWEN. Yes, sir. I understand that, and I guess I was trying to address the point that I do not know if it makes sense to not even have smoke detectors in two stories or less because I believe the danger to fire is just as great.

Senator BRYAN. Let me correct the record there, Mr. Bowen, if I may. The legislation in order to qualify for Federal travel purposes requires a smoke detector in all. The only exception with respect to the two story provision is with respect to the sprinkler provision. So, I think the record needs to be corrected. I did not mean to interrupt the colloquy between you and Senator Ford, but I do think the record needs to.

Mr. BOWEN. I apologize if I misread it then, which I apparently did.

Senator FORD. Well, you are qualified then to write legislation.

Mr. BOWEN. Could I make one comment, then, about construction, sir.

Senator BRYAN. Sure, you bet.

Senator FORD. Because I am into that thing, and I think somewhere along the way if you build fire-retardant or use fire-retardant material, separation of walls, et cetera, somehow or another it seems like you have gone through a lot of expense and then you have to put in the sprinkler and something about that does not seem to me to be fair or safe.

Mr. BOWEN. When you look at the construction issue, I guess, it has been a bit of a situation of two people here in the motel/hotel industry pointing the finger at each other to some degree.

I think the comments that we prepared and have propounded here earlier more or less say we see the need for sprinkling in high rises because it takes more time to get that person off the 25th floor than it does the third floor or the second floor or the first floor.

Now, as I said before, there is certainly some self-serving interest in that position, but I think that it does have merit.

We had the motel in Hagerstown that was the subject of the explosion, and we had people from the NFPA out. We had every fire expert that was in a five-state area, I think, that was there within a few days afterwards.

Each of them lauded the construction of that building because of the fact that there were fire stops in the attics, all of the rooms met the code as far as one-hour fire resistance, and for 70 minutes we had a high pressure, two-inch gas main that was essentially a blowtorch for that building. Yet, that frame construction other than the immediate area where that blowtorch was going withstood the flames.

And you had all of these people that were there at 2:00 or 3:00 in the morning safely evacuated from the building except those people who were in the immediate area of the explosion.

So, please look carefully at construction and do not just assume that the masonry construction is, by itself, the only answer.

Senator FORD. A country boy just thinks about concrete. That is what they put the casket in down home. It makes it safe.

So I just—it is something here. I agree that the only problem you are going to have is the image that might be given from this when they said the Federal employees cannot stay in this hotel.

The next thing they will do, they will want you to put a sign up out front saying uh-uh, you cannot stay here. So then that does create a lot of problems.

I think this has a far-reaching effect. But on the other side of that coin, we do want to come down on the side of safety, and I think we will do.

Thank you, Mr. Chairman, for letting me interrupt your hearing here.

Senator BRYAN. Thank you very much, Senator Ford. We appreciate your joining us today.

Gentlemen, we thank you for your testimony. We are going to keep the record open in this proceeding to allow any of our colleagues who may have some additional questions. We would appreciate your response to those should they be forthcoming as quickly as possible.

This subcommittee hearing stands adjourned.

[Whereupon, at 12:25 p.m., the subcommittee adjourned, subject to the call of the Chair.]

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS

STATEMENT OF MARVIN J. BOEDE, GENERAL PRESIDENT, UNITED ASSOCIATION

The United Association represents 330,000 members of the plumbing, pipefitting and the fire protection trades in the United States and Canada.

I am a member of the Executive Council of the AFL-CIO and the Building and Construction Trades Council. I am submitting this statement in support of H.R. 94.

When it comes to saving lives in a fire, sprinkler systems are perhaps the most effective tool we have. UA members know this from experience and we would like to see these systems become law.

Others have testified citing examples of various fires in which lives could have been saved with the use of sprinklers. Sprinklers are not a new product on the market. They have been around since the 1800's. We know they work and we know they save lives. But, unfortunately it seems necessary for a major tragedy to take place to get our lawmakers to take legislative action.

Most states with sprinkler laws enacted them following tragic fires that claimed hundreds of lives. Last month the state of Tennessee began considering a sprinkler retrofit ordinance after 16 persons died in a Christmas Eve fire in an 11-story retirement home.

The United States has the worst fire record in the industrialized world. We ought to be ashamed of that record and we ought to do something about it.

The simple solution is sprinklers. They are the most cost effective means of automatically detecting and suppressing a fire, while simultaneously sounding alarms to warn building occupants.

Fire can be contained to one room instead of spreading to an entire building with the use of sprinklers.

The objectors of this legislation claim the costs of installing sprinklers is prohibitive. We have heard this objection in every state that has passed a sprinkler law, but, it has yet to be proven. And, we know it just isn't true. Those states with sprinkler laws have saved both money and lives.

These naysayers should ask themselves about the costs involved in the payout to families whose loved ones have been lost in these terrible hotel and motel fires. The millions of dollars paid to those families cannot bring back their loved ones, nor can those dollars erase the tragedies. How do you place a cost on broken families who must live in the shadow of charred bodies?

If sprinklers had been installed those payouts would not be necessary and those families would be whole.

A recent National Fire Protection Association report compares two fires, one in Georgia and one in Florida. Both fires were similar, both had one occupant who had no capable means of escape.

The only difference cited in the report was under the heading "condition when found." One was listed as "wet and frightened." The other "dead." The difference was that the "wet and frightened" victim was saved by sprinklers.

Even the hotel industry has acknowledged the need for sprinklers. Many are requiring the installation of sprinklers in their properties, even the small two-story ones.

Smoke detectors and cement block walls won't put out a fire started by a careless guest who falls asleep while smoking. Sprinklers will!

We support H.R. 94. The traveling public should be able to relax in comfort knowing that every effort was taken to protect them. Without sprinklers there is no real fire protection!

STATEMENT OF

L. DENNIS KOZLOWSKI
PRESIDENT AND CHIEF EXECUTIVE OFFICER

GRINNELL CORPORATION

Founded in 1850, Grinnell Corporation is the largest manufacturer and supplier of automatic sprinkler and fire protection and detection systems in North America. With over 10,000 employees, Grinnell is the only fire protection company with a network of sales, installation, and maintenance offices throughout the United States (including Hawaii and Puerto Rico), Canada, and Mexico. Grinnell produces all of the components for its automatic sprinkler systems and is able to provide a full range of design, installation, maintenance and inspection services on a uniformly dependable basis.

Grinnell Corporation fully supports H.R. 94, the Hotel and Motel Fire Safety Act. This bill recognizes that sprinkler systems and smoke detectors together are the most effective and reliable means available today to save lives and property from the destruction of fire. On this point there is unanimous agreement among fire fighters, fire chiefs, fire marshals, building engineers, and insurance companies - in short, just about everyone with knowledge of fire prevention and extinguishing methods.

Automatic fire sprinklers are individually heat-activated, and tied into a network of piping with water under pressure. When the heat of a fire raises the sprinkler temperature to its operating point (usually 165 degrees Fahrenheit), a solder link will melt or a liquid-filled glass bulb will shatter to open that single sprinkler, releasing water directly over the source of the heat.

Sprinklers are so effective because they operate in the area of fire origin, preventing a fire from growing undetected to a dangerous size, while simultaneously sounding an alarm. Automatic sprinklers keep fires small. The majority of fires in sprinklered buildings are handled by one or two sprinklers.

Sprinklers are so important for life safety because they do not rely upon human factors such as familiarity with escape routes or emergency assistance. They go to work immediately to reduce the danger of fast developing fires of intense heat which are capable of trapping and killing dozens of building occupants. Toxic smoke is generally the cause of death to building occupants. Although smoke is produced as sprinklers extinguish a fire, such quantities of smoke are less than those which would be produced by an unsprinklered fire permitted to grow. In addition, sprinklers keep dangerous toxic particles contained in smoke from spreading.

The record for sprinklers speaks for itself. There has never been a multiple loss of life in a fully sprinklered building. No other fire protection feature is as effective and reliable as sprinkler systems.

In order to ensure that a sprinkler system operates properly, we recommend that the system be inspected on a quarterly basis. The cost of a maintenance contract ranges from \$500 to \$1000 a year. Ninety percent of our retrofitted properties are under contract for inspection service. Other properties are required by their insurance carriers to have trained people on site to perform inspections. An inspection involves checking the control valve to make sure it is open, checking the gauges to make sure there is pressure in the system, opening the main drain to make sure that water is flowing through the system, and a general inspection of the system to ensure that sprinkler heads are not damaged or missing. The inspectors also look for any changed circumstances such as renovations which may affect the system.

H.R. 94 is the most important federal initiative addressing fire safety issues since the Federal Fire Prevention and Control Act of 1974 which created the United States Fire Administration (USFA). USFA is charged with pursuing initiatives in technology, education, and public awareness designed to address and reduce the unacceptable loss of life, injuries, and destruction of property for fire in this country.

Grinnell Corporation worked closely with USFA in the development of automatic sprinkler systems that would be suitable for installation in residential occupancies where people sleep including hotels and motels. Through the contributions of many in the private sector working together with the federal government, "quick response" technology was developed which is cost effective, aesthetically acceptable, and adaptable to existing as well as new construction. The quick response sprinkler system reacts five times faster than any other product available and will use significantly less water to extinguish a fire. Sprinkler systems are so effective today, we have the ability to save people within the room of fire origin, something unheard of ten years ago.

This legislation was first proposed in the aftermath of the tragic Dupont Plaza Hotel fire in which 97 people perished and another 150 were injured. In hearings before the House Science, Space, and Technology Committee, numerous expert witnesses testified that the disaster could have been averted if the hotel was equipped with sprinklers and smoke detectors. Armed with this information, Congressmen Doug Walgren and Sherwood Boehlert sought legislation to promote the use of sprinkler and smoke detection systems in places of public accommodation.

The legislation pending before the Consumer Subcommittee sets a policy requiring federal employees traveling on official business to stay at hotels equipped with sprinkler and smoke

detector systems in most instances. This very same policy has already been adopted by many large corporations for their employees who travel. It is important to note that the legislation does not mandate the installation of sprinklers and smoke detectors in every hotel and motel property in the U.S. That is still an issue that must be addressed by state and local authorities. However, the legislation does provide a strong incentive for hotels and motels to install sprinklers in the form of the federal travel dollar.

The cost of retrofitting existing hotels and motels is an important issue. It depends upon many factors such as the building type and construction, availability of public water supply, and degree of hazard of the occupancy. The National Fire Sprinkler Association estimates an average cost of about \$1.50 per square foot based on a survey of retrofit jobs in the Chicago area. Retrofit is more expensive than installations in new construction because more labor is involved with patching and restoration work. However, the cost to install a sprinkler system is comparable to the cost to install new carpeting, an investment made by most hotels every five years.

Many hotels owners recognize that the benefits provided by sprinklers and smoke detectors far outweigh the initial investment. Tragic fires we hear about every day in the media are reason enough to retrofit hotels and motels with modern fire protection and detection systems. It could be one of the most important investments made in a hotel. In the event of a fire the costs are enormous and include a loss of property, revenues, public confidence, and increases in liability insurance premiums. When lives are lost and people are injured, our society must absorb the costs through higher insurance premiums for medical expenses, legal fees, and liability payments to the victims and their families. The Dupont Plaza Hotel fire generated lawsuits that exceeded \$1 billion. All would agree that sprinkler system costs are recouped the first time it activates and extinguishes a fire. Automatic sprinklers pay for themselves in damage prevented.

Leading hotels such as Marriott, Hilton, and Sheraton are installing quick response sprinkler systems in all new construction and are retrofitting all existing properties. These hotels will testify that retrofitting, in most instances, can be completed with little or no disruption in operations or inconvenience to guests. We have retrofitted hotels where the guest rooms being retrofitted were occupied during the installation process. Grinnell Corporation has produced a video that displays the retrofit process and addresses the most common concerns that hotel owners and managers have about retrofitting. We have provided that video to your staff and hope that it will be helpful in your study of this issue.

Some have asserted that properties built with non-combustible construction materials and furnished with fire-retardant or flame resistant furnishings should not be retrofitted because the environment already provides life safety features. Unfortunately, there are always flaws in that environment. Walls and shafts can be breached by means of poke-throughs and building alterations. Exit doors can be blocked or locked. Hotel guests bring their personal items into their rooms including cigarettes, a leading cause of hotel fires. There are many examples of devastating fires that have occurred in hotels and motels built with non-combustible construction materials and fire-retardant or flame-resistant furnishings. In fact, the chemicals used on fabrics to provide fire-retardant or flame-resistant properties are quite toxic when they do burn. It is true that all fire protection features have a reliability factor. It is also true that sprinklers and smoke detectors are the most reliable fire protection systems known.

On behalf of the entire Grinnell family, I would like to thank Chairman Bryan and his colleagues of the Consumer Subcommittee for their interest and enthusiasm on this important life safety initiative. We urge you to move H.R. 94 to the full Commerce Committee for markup and then to the floor of the United States Senate for a vote. We have the means within our reach to eliminate practically all destructive and life threatening fires from the hotel and motel environment. We at Grinnell Corporation look forward to the challenge presented by H.R. 94.

Thank you for the opportunity to provide our comments on this very important legislation. Please feel free to call upon us as your Committee deliberates on this issue.



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Statement of
John A. Heslip
President
The National Concrete Masonry Association

regarding
H.R. 94

before the
Senate Subcommittee on Consumer

April 19, 1990

Mr. Chairman, I appreciate this opportunity to express the views of the National Concrete Masonry Association (NCMA) regarding H.R. 94.

NCMA represents hundreds of businesses across the country in the concrete masonry industry. NCMA provides support and services to producers of concrete brick, block and paving materials. We actively promote the use of concrete masonry construction products to enhance fire safety construction, as well as provide input to the regional building codes, provide government relations representation, marketing support, new product and technology development and testing in our on-site laboratory and other services.

NCMA has been very active in promoting fire safety for many years, primarily by advancing a comprehensive approach to fire safety known as BALANCED DESIGN. Briefly, balanced design incorporates the characteristics of three fire safety methods -- detection, suppression and containment (which generally translates into smoke detectors, sprinklers and compartmentation using fire-resistive construction materials). Each method considered individually has its own strengths and weaknesses; balanced design uses a combination of all three methods synergistically to provide comprehensive protection and reduce the chance of catastrophic failure in case one or two methods are willfully defeated or accidentally compromised.

NCMA and a coalition of seven other industry organizations were

instrumental in bringing about a hearing before the House Subcommittee on Science, Research and Technology on July 28, 1988, to fully examine the issues encompassing balanced design. Our coalition is currently advocating a federal government study to develop a technical definition of balanced design to assist in quantifying the benefits the concept offers.

I am attaching an editorial on balanced design that recently appeared in Roll Call.

Mr. Chairman, NCMA applauds the sponsors of H.R. 94, and most especially distinguished Members of Congress like Sherwood Boehlert and cosponsors like Doug Walgren, Robert Walker and Curt Weldon. We recognize that one of the greatest impediments to improving America's sad record on fire safety is the lack of attention the issue receives except for the days immediately following notorious disasters. These gentlemen have done an exemplary job of bringing continuity to the discussion. They are doing the public a great service in focusing attention on fire safety. We greatly appreciate your interest in the matter as well, and your willingness to look at the broad range of issues put forth by H.R. 94.

Having said that, NCMA and the Coalition for Balanced Design have notified you that we cannot support the bill in its present form. Although its intent is sound and laudable, the bill has several serious flaws which I will summarize here. It is under-inclusive and too narrow in prescribing fire safety methods. It is based on the false premise that smoke detectors and sprinklers are "the most effective" means of providing fire protection. It would send wrong messages to code officials and the building design community regarding future construction, signaling a decline in the importance of fire-resistive materials. It would exacerbate the problem of trading off one fire safety component against another.

If it becomes law, H.R. 94 will become the latest clear statement on the federal government's definition of what constitutes acceptable fire safety and acceptable risk. Therefore, it is imperative that Congress recognize that this bill will have ramifications far beyond the limits of the hotel and motel construction market. NCMA will be pleased to support efforts to expand the application of comprehensive fire safety legislation. But these factors only underscore the need for H.R. 94 to be a comprehensive statement, not a piecemeal approach which may provide incrementally better protection in certain narrow situations but which might open the door for reduced protection and greater risks if applied generally.

This is especially true regarding future construction. Although most of the commentary surrounding the bill focuses on improving fire safety in existing hotels and motels, it is our understanding that H.R. 94 will apply prospectively to new construction as well. It is in future construction that we feel

most of the problems we cite would rapidly become apparent.

In keeping with NCMA's affirmative stance on fire safety, we will recommend amendments that, if enacted, would remedy the deficiencies and allow our industries to fully support passage.

The foremost problem with H.R. 94 is that it appears to be based on the false premise that fire safety is a function of sprinklers and smoke detectors alone. The bill is utterly devoid of any mention of structurally-based fire containment methods using construction materials and fire-resistive separations. Construction materials are a critical component in determining a building's fuel load (the amount of material present on which a fire may feed). Yet, fire-resistant construction materials are not addressed in the bill.

Under "Section 2, Findings and Purpose," the bill asserts that -

"when properly installed and maintained, automatic sprinklers and smoke detectors provide the most effective safeguards against the loss of life and property from fire..."

This finding gives the strong impression that smoke detectors (detection) and sprinklers (suppression) alone are the only salient factors in enhancing fire safety, and that consideration of containment (compartmentation) using fire-resistive separations is, by inference, unnecessary and unwarranted. We assert that such a statement is contrary to the previously stated view of the U.S. Fire Administration and insupportable given the data and state of the art of fire science.

In the afore-mentioned hearing held before the House Subcommittee on Science, Research and Technology on July 28, 1988, a number of witnesses examined fire safety in multi-family housing. At that time, the Administrator of the U.S. Fire Administration, Clyde Bragdon, evaluated methods of preventing fire losses, focusing on detection, suppression and containment. Mr. Bragdon's view was that all three methods can be very effective for different reasons in preventing the spread of fire, but that no one or two methods can provide "the best answer" to fire safety. Instead, he said a synergistic combination of methods is preferred to provide comprehensive protection. Part of Administrator Bragdon's summary regarding his views on detection, suppression and containment (compartmentation) follows in pertinent part:

The United States Fire Administration believes that there is merit in each of these approaches. Used in concert, the elements of detection, fire sprinkler systems and compartmentalization [sic] can significantly enhance the safety of building occupants from fire and can achieve a significant lowering of the rate of property loss due to fire. (underlining added)

Administrator Bragdon continued:

What I have described to you, of course...is a systematic approach, a balanced approach, to fire protection, that no single piece of hardware, no single technology, provides everything...I prefer to have...some redundancy in case there is a system failure; don't put all your eggs in a single basket.
(underlining added)

Mr. Bragdon's testimony establishes the importance of compartmentation as a fire safety component in similar terms as detection and suppression. Compartmentation is a very significant and effective means of enhancing fire safety (though there has never been any serious question on this point), as are sprinklers and smoke detectors. All three methods influence the dynamics of fire propagation in different and mutually supporting ways, and all should be provided for in a federal policy promoting fire safety in places of public accommodation.

Unfortunately, H.R. 94, as currently drafted, does not recognize the compartmentation component, a flaw which not only influences the functional provisions of the bill, but which would also send a powerful negative signal to architects, developers, code officials and a host of other construction entities that do recognize the importance of fire-resistive separations in containing the spread of fire.

By omitting consideration of construction materials, H.R. 94 would actually punish existing hotels and motels that have made major commitments to fire safety through fire-resistive separations by failing to recognize those commitments. The message for future hotel and motel construction would be to reduce resources for compartmentation and shift those resources to sprinklers and smoke detectors, regardless of whether such a strategy is advisable from a fire safety standpoint. Such a policy would actually discourage builders who make good use of fire-resistive separations. They would be compelled to discontinue this proven fire safety practice to the extent allowable and shift resources elsewhere in order to avoid the penalties in H.R. 94.

The bill as drafted would send the message that construction materials are a non-issue as far as federal fire safety policy is concerned. We feel this would have a devastating impact on efforts to expand, promote or even continue the use of fire-resistive separations, in that H.R. 94 may become a watershed bill shaping the federal government's role in fire safety.

It would exacerbate, not ameliorate, the problem of "trade-offs" between fire safety resources, a problem that was discussed at length in the afore-mentioned hearing.

If H.R. 94 were to become law in its present form, encouraging

the use of sprinklers and smoke detectors but remaining silent regarding fire-resistive construction, it would encourage builders to trade off funding for fire-resistive construction materials in order to divert resources to sprinklers and smoke detectors.

If part of the intent of the bill is to encourage greater fire safe construction in future hotels and motels, but it only encourages builders to trade off one fire safety component for another, the bill would be, at best, neutral in improving the quality of future construction. At worst, it could become a justification to relax standards on proven fire-resistive separations, and concentrate an unbalanced reliance on sprinklers and smoke detectors.

We would like to emphasize that we do not question the effectiveness or the efficacy of smoke detectors and sprinklers when used properly and within the context of the systems approach described by Administrator Bragdon. In fact, we want to make it clear that we strongly advocate their use -- as part of the comprehensive balanced design concept. In our view, smoke detectors and sprinklers are no more dispensable than fire-resistive separations.

Smoke detectors, sprinklers and fire-resistive separations each have individual strengths and respond to fire threats in different ways; a combination of all three draws upon the strengths of each. The differences also highlight the reasons why a multi-faceted approach is needed. Both smoke detectors and sprinklers are active systems that require dependable periodic maintenance to work properly. If those systems fail, a hotel or motel that has placed all of its fire safety assets in active systems will become a fire trap -- unless fire separations are present to prevent the propagation of fire through the structure.

For those who feel that smoke detectors and sprinklers are sufficient in themselves, without support from fire-resistive separations, to provide the most effective safeguards, a sobering fact must be considered. Active systems can and do fail. When they fail in the absence of compartmented construction, there is essentially no fire protection; the losses may be rapid and catastrophic.

The November/December 1989 issue of Fire Journal issued a report on large-loss structure fires in America in 1988. In 28 of the fires, no suppression system was in place. But in 15 of the fires, there was a suppression system in place and the properties were destroyed anyway. In 6 cases, the fires started in areas not covered by partial sprinkler systems. In 3, the systems were out of service, 1 due to cold weather, 1 for repairs, and 1 due to a break in a water main.

In other cases, explosions before the fire essentially prevented the sprinklers from working. In 1 arson case, the fire burned so

quickly that it simply overwhelmed the suppression system. In another case the fire raced up some combustible material over the top of the sprinklers. In 1 case, the suppression system simply failed to work for unexplained reasons.

The same edition of Fire Journal reviewed detection systems. Of 31 large losses, at least 12 of the buildings had detection systems of various types. In most cases, losses occurred because the systems provided only partial coverage. In 1 case, a battery was missing. In some cases, the status of the detection system was unknown.

Mr. Chairman, we are attaching excerpts in pertinent part from the Fire Journal article in question.

The lesson from real world performance records is clear. Sprinklers and smoke detectors are very good systems for enhancing fire protection within the context of an overall fire protection strategy, but they are by no means so infallible, invulnerable or fool-proof as to justify the total reliance, without fire separations, that H.R. 94 expresses. The Fire Journal report indicates that system failures, for whatever causes, do occur occasionally, and the risks of loss would be very high if fire separations are ignored.

It is noteworthy that the bill itself places a caveat on the reliability of sprinklers and smoke detectors. You will note that in Section 2 (2), the bill prefaces its statement on the efficacy of sprinklers and smoke detectors with the qualifying clause "when properly installed and maintained..." Of course, this begs the question of what level of protection may be relied upon when systems are not properly installed or maintained.

A policy which promotes detection and suppression without placing an equal emphasis on compartmentation could result in catastrophic losses in future buildings where fire-resistive separations will be traded-off to accommodate the preference for sprinklers and smoke detectors in H.R. 94. In these circumstances, the potential for disaster in a crowded hotel or motel is nearly too terrible to contemplate, even though such structures might appear to meet the requirements of H.R. 94.

The risks would be lowered dramatically by incorporating compartmentation. Compartmentation using fire-resistive construction, a passive method based on durable materials that require little if any maintenance, can provide protection at all times regardless of power failure, or a loss of water pressure, or vandalism, or arson, or weather, or point of origin of fire. It is the only method that is effective for fires starting on the exterior of the building. It is the only method that can protect the structural integrity of buildings even if active safety systems fail, which is important to occupants and fire fighters alike.

For these reasons, we cannot support H.R. 94 if it retains language that places undue reliance on detection and suppression while failing to give equal consideration to compartmentation with fire-resistive construction. We feel that any legislation that does not address all three methods similarly will be the wrong solution to the right problem, creating opportunities for devastating fires in certain cases by providing a de facto disincentive to build compartmentation into new projects. However, if H.R. 94 is modified to fully include compartmentation and the balanced design concept, these concerns would be eliminated and we would be able to give our strong endorsement.

Senator, we recommend that when your Subcommittee considers H.R. 94, you support amendments as follows:

(strike Sec. 2 (a)(2) and insert in lieu thereof):

(2) when properly installed, maintained and constructed, automatic sprinklers and smoke detectors combined with compartmentation using fire-resistive construction provide the most effective safeguards against the loss of life and property from fire;

(immediately following the provisions in Sec. 29 (a)(2)(C), insert the following new requirement:)

"(3) a requirement that in each place of public accommodation affecting commerce, all rooms shall be separated from adjacent rooms and interior corridors by two-hour-rated fire-resistive separations.

(strike the first sentence under Sec. 30 and insert the following new sentence):

"Sec. 30. The Director, acting through the Administrator, is authorized to take steps to encourage the States to promote the use of automatic sprinkler systems, automatic smoke detection systems and compartmentation using two-hour-rated fire-resistive construction, and to disseminate to the maximum extent possible information on the life safety value and use of such systems.

Senator, we feel that H.R. 94 can be a major step forward in focusing national attention on the lackluster state of fire safety generally in America. We hope you will agree that the changes we are recommending will indeed improve the bill's chances for meeting the goals set forth in Sec. 2 of saving lives and protecting property. We look forward to working with you and the other Members of the Subcommittee to improve H.R. 94 for the good of all Americans who will benefit from a comprehensive approach to fire safety.

STATEMENT
OF THE
PORTLAND CEMENT ASSOCIATION

The Portland Cement Association (PCA) is a trade association representing North American cement manufacturers. It carries out extensive programs of basic and applied research, market development and promotion, education, public relations and government affairs on behalf of its member companies.

To better address the issue of fire safety, PCA has for many years worked directly with the National Institute of Standards and Technology on fire safety evaluation. The Association, through its wholly owned subsidiary, Construction Technology Laboratories, is currently involved in a Research Associate program with NIST to examine the applicability of fire models as a method to analyze fire performance issues unique to multifamily dwellings. Because of the significant role concrete can play in the containment of fire, our industry has more than a casual interest in the Committee's consideration of H.R. 94.

Cement is a product that is used in over 90 percent of all construction activities nationwide, including concrete designs of hotel/motel structures. As a fire resistive construction material, it serves well in containing the spread of fire.

We are concerned that H.R. 94 fails to take into consideration the use of construction materials which serve to compartmentalize damage and limit loss of life.

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The cement industry is very much concerned that trade-offs, i.e., smoke detectors (detection) and sprinklers (suppression), are identified as the only safety systems to be employed in structures for public accommodation. We refer specifically to Section 2, "Findings and Purpose" which states that: "When properly installed and maintained, automatic sprinklers and smoke detectors provide the most effective safeguards against the loss of life and property from fire..."

We support the premise that such devices are safeguards, but they are not the only means of enhancing safety. In fact, it may be dangerous to rely on a system that in turn relies on utilities (electricity and water) for its function. In many cases, when fire erupts, electrical current may be interrupted and water supply to the structure may lose pressure or be turned off altogether. Such a predicament was addressed by Mr. Jack Snell, Director, Center for Fire Research, National Institute for Standards and Technology (NIST), in hearings before the House Subcommittee on Science, Research and Technology on July 28, 1988.

In addressing such tradeoffs, Mr. Snell said, "...a prudent prescription for fire safety involves some combination of the

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elemental fire safety strategies of prevention, confinement, fuel control, smoke control, early warning, suppression, and escape and rescue. Reliance on any single fire protection strategy leaves the door wide open for disaster." Mr. Snell went on to say that a better approach would be "...to combine sets of strategies into safety systems which are assured to deliver desired performance even when individual strategies fail."

Our industry has long felt that implementation of a balanced design which incorporates the characteristics of detection, suppression and containment is a far more effective course of action. This system would include smoke detectors, sprinklers, and compartmentation using fire resistive construction materials. The use of such materials is not addressed in H.R. 94.

As drafted, the bill does not recognize compartmentation as an important factor in fire safety and, in fact, promotes the practice of "trade-offs" between fire safety resources. Sprinkler systems and smoke detectors are important and should be required, but not with a reduction in the 2-hour containment rating which is extremely important to the element of escape or rescue.

Compartmentation using fire-resistive construction can provide significant protection regardless of power failure, loss of water

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pressure, or other unforeseen events. This passive method based on durable materials that require little if any maintenance is the best method to protect the structural integrity of buildings when other systems fail.

We feel that H.R. 94 does not adequately address a comprehensive fire safety program that would include early warning devices, adequate suppression systems, fire-resistance construction for compartmentation, and structural integrity. Adding suppression features while eliminating non-combustible compartmentation is not acceptable.

We urge the Committee to consider a broader range of options, which would preclude the construction industry and design engineers from accepting the legislation as "the most effective safeguards against the loss of life and property from fire..." as is enumerated in H.R. 94. As written, the legislation would send the wrong message to code groups and the design industry and could result in unsafe and life-threatening trade-offs for low-bid construction costs.

An option the Committee may wish to consider is a request by Representative Curt Weldon, Chairman of the Congressional Fire Services Caucus, to the Center for Fire Research, NTIS, to

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develop a technical definition of "balanced design." The concept would be a comprehensive approach to building construction designed to significantly reduce the loss of life and property caused by fire. The Committee may wish to examine such a definition as a means of enhancing a national policy on fire safety.

The cement industry appreciates this opportunity to express its views, and we look forward to working with the Subcommittee in its efforts to protect the public through an enhanced national approach to fire safety.

STATEMENT
OF
SOLITE CORPORATION

Mr. Chairman, Solite Corporation appreciates the opportunity to comment on H.R. 94 ("Hotel and Motel Fire Safety Act") and on the subject of fire safety in general.

Solite Corp. is the United States' largest producer of lightweight aggregate, a construction material used primarily in concrete and masonry. A diversified manufacturer and supplier of building materials and products, Solite operates facilities in Virginia, Kentucky, New York, North Carolina, Florida, and Alabama.

Not only does Solite Corp. provide fire-resistant construction materials, but we have actively promoted fire safety through the use of "balanced design" with architects, engineers, owners, developers, and building code officials. Our goal in this effort is for buildings to be fire-safe, built so as to allow time for evacuation and to provide structural stability for those reentering buildings to fight fires, and the containment of fire in one compartment of the building thereby minimizing loss of life and property. In short, balanced design should be incorporated in order to provide buildings which are fire-safe.

Balanced design is the inclusion of all three of the necessary elements of fire safety: detection (smoke detectors), suppression (sprinklers), and containment (compartmentation achieved with fire-resistive construction materials). Considered individually, each

Solite - P.3

method has its own strengths and weaknesses. Balanced design combines all three of these to provide comprehensive protection and significantly reduce the chances of catastrophic failure should one element fail to perform.

The very real possibility that a fire safety method could fail is the reason for Solite Corporation's concern about H.R. 94. As it currently reads, the bill places an unsafe amount of reliance upon two of the three elements of fire safety (detection and suppression) without taking into account the realistic chances of one of these methods failing. Unfortunately the bill overlooks that possibility by not encouraging a backup system.

What are the chances of detection or suppression systems failing? Unfortunately, the chances are quite reasonable. Smoke detectors and sprinklers are active systems which require proper installation and dependable periodic maintenance in order to work properly. Reading the excerpt from "U.S. FIRE SPRINKLER REPORTER" (following this page) alerts one that any system relying upon human beings is never perfect. Active systems can and do fail. When they fail in the absence of compartmented construction (a passive system), there is essentially no fire protection at all, and losses can be catastrophic.

When present and working properly, sprinklers can be effective in helping to control and extinguish fires. However, suppression systems

Solite - P. 3

are not always sufficient in themselves, without support from fire-resistive separations. . The following two pages from the November/December 1989 issue of Fire Journal document large-loss fires which occurred in sprinklered structures in 1988. In 15 structures suppression systems were in place and the properties were destroyed anyway. In six of the 15 fires, the sprinkler system was only a partial system which did not cover the area of the fire's origin. In three properties the systems were out of service (one shut off for repairs, one shut off due to cold weather, and one off due to a water main break). In two properties explosions caused the systems to be inoperative. In two others the sprinklers were overpowered by the fire, and in another the system was depleted of extinguishing agent as a result of fighting a previous fire.

The same issue of Fire Journal reviewed automatic detection systems as well. It reveals that of the 31 large losses studied at least 12 of the buildings had detection systems. In most instances, losses occurred because the systems provided only partial coverage. In one fire, the smoke detector did not work due to lack of a battery.

The lesson from real-world performance is quite clear. Sprinklers and smoke detectors are very effective systems for enhancing fire protection as part of an overall fire protection strategy, but they are by no means so infallible or invulnerable as to justify total reliance upon them.

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promotion of fire-safe construction. We recommend that the following amendments be included in H.R. 94:

(strike Sec. 2 (a)(2) and insert in lieu thereof):

(2) when properly installed, maintained, and constructed, automatic sprinklers and smoke detectors combined with compartmentation using fire-resistive construction provide the most effective safeguards against the loss of life and property from fire;

(immediately following the provisions in Sec. 29 (a)(2)(C), insert the following new requirement):

(3) a requirement that in each place of public accommodation affecting commerce, all rooms shall be separated from adjacent rooms and interior corridors by two-hour-rated fire-resistive separations. This requirement shall apply only to new structures placed in service after January 1, 1993.

(strike the first sentence under Sec. 30 and insert the following new sentence):

Sec. 30. The Director, acting through the Administrator, is authorized to take steps to encourage the States to promote the use of automatic sprinkler systems, automatic smoke detection systems, and compartmentation using two-hour-rated fire-resistive construction, and to disseminate to the maximum extent possible information on the life safety value and use of such systems.

We hope you will agree that our proposed changes to this bill will increase the chances of this bill meeting the goals of saving lives and protecting property as set forth in Sec. 2. This is an opportunity to make the United States more fire-safe, and H.R. 94 can be a major step toward that goal if it includes all three elements necessary for protecting life and property from the devastation of fire.

ROAD
SPRINKLER
FITTERS
L.U.NO.669



STATEMENT OF SUPPORT FOR HR-94
THE HOTEL/MOTEL FIRE SAFETY ACT
BY
ROAD SPRINKLER FITTERS LOCAL UNION 669 BUSINESS MANAGER
H. V. SIMPSON

My name is H. V. Simpson, and I am the Business Manager of Road Sprinkler Fitters Local Union 669, U.A. Local Union 669 is affiliated with the United Association of Plumber and Pipefitters. We currently represent over 8,200 skilled and trained members nationwide. We take great pride in providing the apprenticeship and training program necessary for the installation of fire protection systems. 1990 marks a real milestone in our history because it represents our seventy-five years in existence.

Local 669 is a Corporate Sustaining Member of the International Association of Fire Chiefs, and has supported both of the annual Fire Services Institute's dinners. We share the common goal of the fire services in the effort to save lives.

We are a national union, which means we represent members throughout the entire United States. It is with that responsibility that we aggressively pursue the improvement of fire codes and the promotion of legislation that will best serve the general public at large. Our members, as well as our representatives, are part of the traveling public that will benefit from HR-94. In our field of work, it is very common for us to travel to a workplace, stay in a hotel/motel, and then return home on the weekend. In that vein, we fully understand those government employees who travel during the course of their work.

The United States Senate has an opportunity to compliment those efforts already completed by the House of Representatives. The opportunity will bring credibility to those who are proponents of those things which are in the best interest of the American public. There is no better way of reducing the fear, the devastation, and the loss of life from fire than the proper installation of automatic fire sprinkler systems. The arguments have all been entered, and not one opponent can produce any record that denies the effectiveness of automatic sprinklers.

Automatic sprinklers are often referred to as "the on duty fire fighter, twenty-four hours a day, seven days a week." Time is of utmost importance once a fire occurs. With the ever improving technology in the fire protection industry, that response time is being reduced for the activation of the sprinkler head. The "Quick Response, Early Suppression" concept has enabled a wide acceptance of automatic sprinklers, even in the residential market. A primary reason is that due to water being discharged in the inception stage of a fire, less water is

ROAD
SPRINKLER
FITTERS
L.U.NO.669



Statement of Support
HR-94
Page Two

needed overall. This also reduces the concern often expressed about water damage. Sprinklers work very well in conjunction with smoke detectors when addressing the overall fire problem.

Senator McCain raised a very valid issue concerning the handicapped and the hearing impaired. With the proper installation of automatic sprinklers, whether or not a person is unable to hear, see or smell does not increase his/her risk of losing their life in the event of a fire. You currently have an opportunity to not only reduce the risk for the handicapped who have an occasion to travel, but the general public as well.

We urge your support of HR-94. This session of Congress has the chance to reduce the claim that the United States has the worst fire record in the industrial world. HR-94 is a start in the right direction. Fire sprinklers do save lives.

HVS:mer
May 1, 1990

aberdeen fire



department

aberdeen, south dakota 57401

April 6, 1990

Honorable Larry Pressler
United States Senator
Washington, DC 20510

Dear Senator Pressler:

This letter is to express my concern on H.R. 94 referencing Hotel/Motel Fire Safety. This proposal requires existing properties to retrofit with complete fire sprinkler systems.

Having twenty-five (25) years of fire service experience as a career firefighter, I have served fifteen (15) of those years in fire prevention, code enforcement, and the other ten (10) years in the suppression forces and as a fire chief. The last five (5) of those twenty-five (25) years, I have served as a Vice-President of the International Association of Fire Chiefs.

We have recently seen a revision in sections of codes requiring fire sprinkler systems in new construction of hotels and motels having more than twenty (20) guest rooms and three stories or more in height. These are now considered existing codes and we must learn to live with them.

However, most codes allow buildings that are in existence at the time of the adoption of the new code, have their existing use or occupancy continue as is, providing there is no danger to life. We interpret this to mean that if the existing buildings are not equipped with adequate fire separations, fire walls, fire doors, wiring which has deteriorated over the years, and lack of fire alarm systems, they should at that point be retrofit with fire sprinkler systems. If the facility is equipped with the above mentioned materials and equipment, they need not be retrofit with sprinklers throughout.

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Honorable Larry Pressler
April 6, 1990
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We must remember at this point the people who establish the codes are very credible building and fire engineers who have total understanding of smoke and fire behavior. These people work together as committees representing all portions and sections of the code.

I do not feel that H.R. 94 is justifiable for smaller properties which are in compliance with codes that in fact have originally made these buildings very safe; and because of their layout and size in most cases, can be completely evacuated from the most remote area of the building in as little as a minute.

H.R. 94 would put a severe financial burden on the smaller properties that could very possibly be devastating to many single property owners. I know very well the renovation involved in a retrofit process. It sums up that major construction would be necessary not even mentioning separate and larger water supplies dug into supply sprinklers.

It is my feeling Senator, and the feeling of many colleagues, that H.R. 94 could be revised to include sprinklers in limited areas; mechanical and laundry rooms, and kitchen areas.

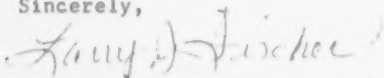
Please understand I am in complete favor of the fire alarm portion of the proposal which gives the earliest possible warning over a sprinkler system, as has been proven.

At any rate, the complete version of H.R. 94 as it is now, is not practical both economically and from the enforcement standpoint in smaller properties, especially.

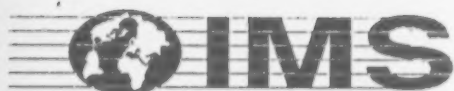
I would ask you to be cautious and give very careful consideration before favoring this proposal.

Should you have any questions, or should you need clarification, please advise.

Sincerely,



Larry J. Fischer, Fire Chief
City of Aberdeen
South Dakota



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April 20, 1990

Senator Richard H. Bryan, Esq.
United States Senate Office Building, SR-364
Washington, DC 20515

Dear Senator Bryan:

I appreciate your including my FAX'd letter of April 18 as a part of the written testimony in your hearing of April 19 on HR94. The original of that letter is enclosed.

My additional written testimony is as follows:

The hotel/motel business in the United States is federally non-regulated and should remain so. Fire codes have been under the jurisdiction of the States and municipalities and should remain so. Federal legislation in this area is an unnecessary intrusion of our States' rights to govern.

I have researched the recommendations of the Council of the European Communities, which was required to study hotel fire safety under the Treaty establishing the European Economic Community. Its lengthy list of recommendations (attached) do not include sprinkler systems or hot-wired smoke alarms. I would particularly like to point out that these recommendations consistently differentiate between hotels of less than three stories. (Technical Guidelines Annex 1.3.4, 2.2.1, 2.2.2, and 2.3.2 attached) Furthermore, nowhere is there any distinction made between exterior and interior corridors.

These recommendations were generated by fire safety experts representing European nations with many centuries more experience with hotel fire safety than the United States. I submit that the U.S. Senate should not intrude in this area of fire safety, which is rightfully the responsibility of the States and local jurisdictions.

Cordially yours,

Kingston L. Howard
Kingston L. Howard, CHA

cc: ELC Members
J. Gaffigan, AH&MA

**AMERICAN TUBE
COMPANY, INC.**

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April 27, 1990

The Honorable Richard H. Bryan
Chairman, Consumer Subcommittee
227 Hart Senate Building
Washington, D. C. 20510

Re: H. R. 94 - Hearing on April 19, 1990

Dear Mr. Chairman:

American Tube Company strongly supports H. R. 94, the Hotel-Motel Fire Safety Act of 1989.

H. R. 94 will save lives and protect property by promoting fire safety in hotels, motels, and all places of public accommodation affecting commerce. Following is a summary of the provisions of H. R. 94:

1. States submit lists of hotels and motels that meet federal fire safety guidelines, which mandate installation of sprinklers and smoke detectors.

2. Beginning 425 days after publication of a master list of hotels/motels that meet those guidelines, no federally funded meeting could be held in hotels/motels that are not on the master list unless a waiver is granted by the head of the agency sponsoring the meeting.

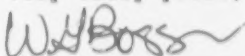
3. Beginning 4 years after enactment of the bill, each federal agency would ensure that at least 65% of its employee travel nights were spent at hotels/motels that are on the master list. That percentage would increase to 75% in the fifth year and 90% thereafter.

American Tube Company has been manufacturing sprinkler pipe for years, and we are very much aware of and proud of the usefulness of sprinkler systems in saving peoples' lives.

The recent fires in buildings in New York City and in Miami should reinforce the urgency and importance of fire safety legislation such as H. R. 94.

Again, American Tube Company strongly supports this measure, and we officially request that this letter be made part of the Senate hearing record.

Very truly yours,



William G. Boggs
Vice President
American Tube Company

STATEMENT OF FREDERICK H. NESBITT, DIRECTOR, GOVERNMENTAL AFFAIRS, INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS

Good afternoon. My name is Frederick H. Nesbitt, and I am the Director of Governmental Affairs of the International Association of Fire Fighters, AFL-CIO. The IAFF represents 177,000 professional fire fighters across the United States and Canada.

At the outset, I want to thank Subcommittee Chairman Bryan for holding this hearing on H.R. 94, the Hotel/Motel Fire Safety Act.

For at least 40 years, the fire service community has known that sprinklers and smoke detection devices are critical weapons in the battle against fire fatalities. Over the past 40 years, the technology for these devices has improved, making their installation affordable and efficient. Despite this progress, many public facilities have not installed these life-saving devices. Tragedies such as the 97 needless deaths in San Juan, Puerto Rico in 1986 are the inevitable result of this reckless omission.

As you are aware, Mr. Chairman, this legislation was approved overwhelmingly by the House of Representatives last year. We strongly urge the Senate to move quickly to adopt this proposal so that the program may be implemented promptly. The sooner the Senate acts, the more likely that lives will be saved.

In 1974, the distinguished National Commission of Fire Prevention and Control, appointed by former President Richard Nixon, issued its dramatic report titled "America Burning." This report analyzed in detail the fire experience and record of the United States, including comparisons with

other industrialized nations. The report was an indictment of the United States' appalling fire loss record. The Commission stated, "Appallingly, the richest and most technologically advanced nation in the world leads all the major industrialized countries in per capita deaths and property loss from fire....The efforts of individuals and organizations in the fire protection field have run against the twin tides of ignorance and indifference--tides which contribute substantially to the extraordinary magnitude of the fire problem in the United States."

During the 16 years since the release of this report, there has been some progress toward reducing deaths and property loss, however, the U.S. record remains unacceptably poor. It is worth noting that 36% of multiple fatality incidents occur in hotel fires. Mr. Chairman, you and I both know what happens when the fire alarm rings in a hotel. Unfortunately, many travelers ignore it and do not exit the building. They assume it is a false alarm or look out the door for smoke or flames. Not enough travelers pay attention to fire exit locations or escape routes. Thus, there is a greater danger in a hotel fire because of this attitude than in a family home or other dwelling. Sprinkler systems and smoke detectors will undoubtedly help save lives of hotel and motel guests across America.

For these reasons, the federal government must take a renewed and comprehensive look at the tragic consequences of uncontrolled fire. Enactment of H.R. 94 represents an important step toward reducing fire fatalities and injuries in multi-story buildings.

Finally, I would like to address the issue of cost. Opponents of this legislation claim the cost would be prohibitive, yet our experience dictates otherwise. Many hotels have installed these systems and continue to operate profitably, and we have seen no reason why others could not also. More importantly, the implication of this argument is that the lives saved by H.R. 94 are not worth the cost of installing these systems. Mr. Chairman, we reject this cold-hearted reasoning, and we urge Congress to do so as well.

In closing, I want to state that enactment of this measure provides only one line of defense, among many, to the nation's fire problem. Legislation is also needed creating stronger building codes and stricter fire safety and toxicity standards for finishing materials and furnishings. There is much room for improvement in our fire record, and I urge the Subcommittee to move expeditiously to mark-up and favorably report this important piece of safety legislation.